Attachment 5

Contingency Plan

SECTION 2.70

EMERGENCY RESPONSE PROCEDURES AND CONTINGENCY PLAN

ENVIRONMENTAL DISPOSAL SYSTEMS, INC.
CITRIN DRIVE FACILITY
ROMULUS, MICHIGAN

REVISION 0
January 20, 1998

Control Copy No. 0

Assigned to: Act 451, Part 111 Application

Date: January 20, 1998

CONTINGENCY PLAN COPY CONTROL LOG

Copy Number	Assigned To	Date	Revision
1	451 Part III Application	1/20/98	0
2	Security Station		
3	Site Office		
4	Control Room in Treatment Building		
5	Laboratory		
6	General Manager		
7	Site Safety Officer		
8	Romulus Fire Department		
9	Taylor Fire Department		
10	Wayne County Emergency Response Team		

Note: When a change is made to this document a revised copy will be immediately distributed to all copy holders.

Copy Control

Copies of this Plan will be assigned to each appropriate individual or location for purposes of controlling revisions and making sure everyone has the same revision.

TABLE OF CONTENTS

FIGURES

APPENDICES

TABLES

2.71 Introduction and Facility Description

The proposed facility consists of a treatment, storage and disposal facility for hazardous wastewater to be disposed of in injection wells. The plant will have a maximum storage capacity of 228,622 gallons. The fenced site area is about 5.9 acres in size. Figure 2.70-1 provides a location for the facility. Figure 2.70-2 provides a site plan showing site features. The facility consists of a storage and treatment building, two injection wells, an office building and a security station. Figure 2.70-3 shows detail of the storage and treatment equipment locations.

FACILITY NAME:	Environmental Disposal Systems, Inc. - Citrin Drive	**FACILITY OWNER:**	Remus Joint Venture
FACILITY ADDRESS:	28470 Citrin Drive Romulus, Michigan	**FACILITY OPERATOR:**	Environmental Disposal Systems, Inc.
TELEPHONE:	(313) 955-2100	**TELEPHONE:**	(313) 955-2100

This document is the Emergency Response Procedures and Contingency Plan, hereinafter referred to as the Contingency Plan or Plan, that will be activated in the event of an emergency. A current copy of the Contingency Plan will be maintained at the facility Security Station, the Office, the Laboratory and the Treatment Building Control Room.

2.72 Wastewaters to be Managed at the Facility

This facility has been designed to accept acidic and alkaline wastewaters, low concentration organic-water wastewaters, and brines. The wastes proposed to be received by the facility are best described by three categories of wastes, those being waste pickle liquors, organic-water mixtures, and caustic waters. Table 2.70-1 provides typical EPA Hazardous Waste numbers for wastes proposed for acceptance.

EDS will use it's Waste Analysis Plan to fully describe and categorize received wastewaters and ensure compliance with applicable regulations. EDS will not accept radioactive wastes, infectious wastes, explosive or shock-sensitive wastes, air-reactive wastes, water-reactive wastes, compressed gases, reactive wastes that generate dangerous quantities of toxic or explosive gases when acidified, ignitable wastes (with a flash point less than 140 degrees Fahrenheit), bulk wastes containing 10 percent or more VOCs, or wastes that the General Manager deems cannot be properly or safely managed at the facility.

2.73 Identification of Potential Emergencies

Wastewaters treated at this proposed facility are hazardous primarily due to their pH and high metal content. These wastes pose acute health threats mainly by virtue of their pH. The metals pose only chronic threats to the environment and only chronic threats to humans if extended skin contact occurs or if swallowed, which in this case is highly improbable. No flammables can be accepted at this facility, however combustible liquids can be accepted. Combustibles will be stored separated in the tanks designated for incompatibles. Emergencies at this facility will primarily be limited to vehicle spills, since all other wastewaters are contained in the facility, except for natural events ("Acts of God") and civil unrest that could create spills or leakage.

2.74 What Constitutes an Emergency

An emergency is considered to have occurred when any situation involving the imminent, or probable spillage, leakage, or release of a hazardous substance onto land, water, or the atmosphere that could create an immediate or potential danger to the public health or safety because of its quantity, strength, and toxicity; its mobility in the environment; and its persistence.

2.75 Who Implements the Emergency Response Plan

Decisions to implement the Emergency Response Plan will be made by EDS' Emergency Coordinator (EC), except under conditions where outside agency emergency personnel have authority over EDS such as for a fire, civil unrest and airplane crash conditions. Where outside agencies have authority over EDS, EDS shall perform emergency response work at the agency direction.

See Table 2.70-2 for the names, telephone numbers, addresses, and paging device numbers of the Emergency Coordinators, and their Alternates. On or before the first of every calendar month, the General Manager will post an on-call schedule for the month for EC's. The schedule will identify the Emergency Coordinator who will be on-call for the month and EC's for normal operating hours. There will be an Emergency Coordinator (EC) on call at all times. A logic diagram of emergency response decision making activities is shown in Figure 2.70-4.

Emergency coordinators shall be designated by EDS using a certificate as shown on Figure 2.70-5. The EC's comprehensive training in emergency response shall include:

- Emergency preparedness (Contingency Plan)
- Knowledge of the site evacuation plan
- Incident Response Guidelines
- CPR
- First Aid
- Use of fire extinguishers and fire control measures

All facility personnel will be responsible for notifying security of any event which could possibly require implementation of the Emergency Response Plan. Facility personnel shall utilize telephones located in each building or two-way radios to notify Security. Security will be responsible for notifying the EC. During non-operating hours, security personnel shall notify the assigned EC by telephone, pager and two way radio.

2.76 Emergency Response

2.76.1 Hazard Assessment

The EC determines the character, source and extent of any released materials by visual inspection and reference to manifests, sample analyses, Material Safety Data Sheets and other available sources of information.

Initial assessment includes a review of the following parameters:

- Source of the release
- Condition of the source: e.g., label or placard information, type and size of individual containers, accessibility, manifests, in house records
- Physical state and nature of the material; e.g., solid (powder, pellet, granular), liquid or gas
- Odor, if noticed; e.g., a pleasant smell (almond, ammonia, benzene, vinegar) or an unpleasant smell (sulfur, skunk, onion, sharp, biting, cleaning fluid, or paint)
- Noticeable reaction; e.g., fuming, flaming or gas evolution.

Based on the EC's knowledge of the existing conditions, the EC will determine the following:

- Can facility personnel control the emergency? If not, the EC will notify the appropriate local, state and federal agencies.

- Lines of authority shall be determined. Figure 2.70-6 depicts lines of authority for EDS directed responses. Where outside agencies get involved, on-site the lines of authority are described on Figure 2.70-7. Authority lines for an off-site emergency are shown on Figure 2.70-8.

- Is site evacuation necessary? If so, the EC will evacuate the Site. If partial evacuation is required, the location of the on-site regrouping area

will be designated.

- Is evacuation of the local area around the site perimeter advisable? If so, the EC will communicate the necessary information to the Wayne County Sheriff, the Romulus Fire Department, and the Taylor Fire Department.

2.76.2 Notifications

Emergency Contact List

The Emergency Coordinator with the assistance of Security personnel will contact the appropriate "emergency response" agency(ies) thereby implementing the Contingency Plan.

The EC will then have Security implement the following actions:

1. Activate the alarm system by engaging any of the manual fire/evacuation alarms located next to each telephone.

2. Notify all personnel of danger using the public address system, which can be accessed with the telephone.

3. If there are injuries, notify the hospital and ambulance service (911).

4. Notify the City of Romulus Fire Department (911) in case of fire or explosion and the City Police Department (911) and/or appropriate health and emergency response agencies using the phone numbers provided in this plan and posted near each on-site phone.

5. Notify the Michigan MDEQ (1-800-292-4706) in the event of a spill which could have a potential adverse effect on air, surface water, or groundwater quality. The EC should relay to the MDEQ as many details as possible including chemicals used to combat the release.

6. Notify the National Response Center at 1-800-424-8802 in the event of a spill which in the EC's judgment should warrant any evacuation or if a "reportable" spill occurs. The coordinator is to seek advice from MDEQ and Fire Department officials. If required, the automatic neighborhood notification phone and siren system will be activated.

7. If the emergency occurs during regular business hours, Monday through Friday, The MDEQ Waste Management Division shall be notified at (517) 373-9523. Other emergency numbers which may need to be contacted are provided on Table 2.70-3.

8. Identify any materials and/or wastes released, the amount, and the actual extent of the release. The coordinator will use all the possible means to assess the amount released.

9. Assess the potential for direct and indirect hazards to human health or the environment.

10. Control spreading and/or recurrence.

11. Perform post-incident monitoring and inspections to identify potential problems caused by the release.

12. Submit a post-incident report to the Michigan Department of Environmental Quality.

The following external contacts are made in the event of a release to the environment of a reportable quantity of hazardous waste, even in situations not involving implementation of this Plan:

1) National Response Center ..... (800) 424-8802
2) MDEQ ..... (800) 292-4706
3) MDEQ District Office ..... (313) 953-8905

In situations involving shutdown of a deepwell not affecting the surface environment, the

following agencies shall be notified:

1) MDEQ District Office (Geosurvey Group) ..... (313) 953-1494
2) MDEQ- Southeast Michigan District ..... (313) 953-8905
3) USEPA ..... (312) 353-2197

For a release to an off-site waterway, EDS shall notify:

1)	U.S. EPA Region V Office	(312) 353-2197
2)	U.S. Coast Guard	(313) 568-9580

2.76.3 Evacuation Plan

The EC is the only EDS person authorized to call for evacuation of the site. This action may be taken based upon analysis of the situation or at the request of an outside agency authority.

Evacuation Procedures

The evacuation routes for the building and general site area are shown in Figure 2.70-9 and 2.70-10, respectively. The alternate evacuation route shall be out through the rail gate at the southeast corner of the fenced area.

The following actions will be taken when the EC orders a site evacuation:

1. The EC will activate emergency services by calling the County Sheriff's Department (313) 942-2222 for assistance, reporting any casualties and arranging for their emergency care.

2. The EC will determine which gates will be used depending upon wind direction and the locations of the incident and personnel. The EC will utilize the windsock located at the office to ascertain wind direction and

velocity.

3. The EC will broadcast evacuation instructions via the facility's telephone paging system and two-way radio system.

4. The EC will instruct site personnel to unlock the required exit gates and assist in directing evacuation.

5. All personnel, including visitors and contractors, will be instructed to leave through the exit gates designated by the EC.

6. Gate attendants are to remain at their stations to assist in accounting for outside contractors until they are relieved by the EC, or until such time as the emergency situation becomes a threat to their safety or health.

7. Evacuation will proceed as follows:

   If downwind of incident, evacuate perpendicularly (at 90 degrees) to wind direction over the most accessible route.

   If upwind of incident, evacuate in upwind direction.

8. Personnel will regroup at one of the following areas as designated by the EC:

   Regrouping Area 1 - Parking lot location
   Regrouping Area 2 - Main Security Gate entrance location
   Regrouping Area 3 - Southeast Site Gate

9. Once all personnel have been evacuated, plant gates are to be closed to prevent unauthorized personnel from re-entering the facility. If gates must remain open to facilitate entrance by emergency crews, a representative of the company designated by the EC will be stationed at the gate entrance. Another facility representative will be stationed at the entrance to the administrative office to prevent unauthorized entrance into the office or employee locker room.

10. The EC will initiate a head count and check it against the site attendance system.

11. All attempts to rescue or find persons will be directed by the EC or his designee in conjunction with the responding agencies.

12. In the event of a tornado or severe wind storm, all personnel will be directed to the main office building, or the ground floor central area of the Truck Unloading area.

13. Upon activation of the fire alarm system the following actions will be taken:

    If the fire is out of control, the EC shall make sure that all personnel maintain a safe distance away from the fire. In addition, if possible, all adjacent vehicles are to be moved to another location to reduce the likelihood of further involvement.

    The site fire response will be one of an incipient nature. That is, site personnel may respond to fires of a magnitude which may be suppressed with extinguishers or a water hose. Grass/brush fires are an exception where heavy equipment or flooding techniques may be employed.

14. The evacuation routes from specific site buildings will be indicated by the emergency exit signs located within the buildings. The evacuation route of each building will be very evident in light of the locations of the emergency exit signs.

    The site is accessed off of Citrin Drive. Citrin Drive can be entered off of Inkster Road, north of Wick Road. To get to the site from Interstate 1-94, you would exit at Middlebelt Road (exit 198) and take Middlebelt to Wick or Ecorse. Going east on Wick or Ecorse will take you to Inkster, From Ecorse, you would turn south on Inkster to Citrin, or you would turn north on Inkster from Wick to get to Citrin. Those access roads which can also be used for egress are shown on Figure 2.70-1. Egress can also be accomplished through the southwest corner of the site along a paved road constructed to Wick Road across the Norfolk and Southern Railroad. Facility access will be controlled and maintained during an emergency. The EC will determine the personnel to be admitted during an emergency.

2.76.4 Casualty Control

The EC shall determine the existence of on-site casualties and is responsible for designating a Casualty Control Officer (CCO) where needed.

1. The CCO will assess, implement, and direct first aid for any and all injuries. The CCO will also advise the EC of the need to summon outside emergency medical assistance.

2. The CCO will give the details of the emergency assistance needed to the EC or their designee.

3. The EC or their designee will call the ambulance service (911) as needed.

4. When calling for emergency medical assistance, the following information must be given:

   a) The address and location of the emergency
   b) Nature of the emergency
   c) An estimate of numbers, types and conditions of casualties
   d) The existence of hazardous conditions or special risks
   e) The name, number, and location of caller

5. The CCO will coordinate search and rescue operations.

6. The CCO will designate and inform the EC and search and rescue staff of the location of the Triage Areas, and the Casualty Receiving Area (first aid station). The Casualty Receiving Area will be located at the: Office Building. In case the office building cannot be used, the alternate Casualty Receiving Area is the Security Office.

7. Casualties that can be safely moved by on-site personnel will be transported to the Casualty Receiving Area.

8. The CCO will designate a technical person from the laboratory department to help identify injury causing hazardous agents and provide information on toxicity and decontamination.

If needed, the following organizations may provide emergency chemical

Information:

CHEMTREC	(800) 424-9300
Poison Control	(800) POISON1

9. The CCO will ensure that incoming emergency medical assistance will be escorted to the Casualty Receiving Area or the location of the injured.

10. The CCO shall maintain a record of all casualties; listing names, injuries, disposition.

2.76.5 Containment and Control of Hazards

Spill Response Procedures

In the event of spillage, the following procedures will be instituted:

- For spills from pipes, pumps or valves, the EC shall:
  - discontinue transfer operation, if in process
  - valve off leaking equipment
  - ensure that secondary containment contains released material; remedy any leak sources.
- For spills from tanks, the EC shall:
  - discontinue transfer operation, if in process
  - identify, lowest point of break in tank surface
  - reduce liquid level in tank below lowest point of break by transfer to another tank or tank truck
  - ensure that secondary containment contains released materials and remedy leak sources.

Process-Specific Procedures

Each storage, treatment, and disposal unit at the facility will have built-in control features, and containment structures. Activities specific to each unit are described in Appendix 2.70-1.

Site Security and Control

Site security during an emergency response will be provided as follows:

- The EC will be responsible for having a hot zone, warm zone, and cold zone established and supervised by site or other designated personnel.

- Access through the cold zone, support areas and the corridor to the hot zone will be controlled to prohibit unauthorized personnel such as news persons, onlookers or unnecessary response personnel from entering contaminated areas.

- Access from the hot zone will be controlled to ensure that personnel and equipment are decontaminated before the latter are allowed to exit into the cold zone.

- The EC will ensure that practical physical barriers are erected to prohibit access to unauthorized area.

- The assistance of local law enforcement agencies will be asked to maintain and patrol areas where site security and control is necessary.

- Site security and control will be maintained until all equipment has been decontaminated, equipment and process checks have been completed, and the emergency has been terminated by the EC.

Fire Action Procedure

Upon discovery of a fire or explosion at the EDS facility, the Emergency Coordinator directs the necessary personnel to fight the fire. This may include the use of the Fire Brigade Team trained in the proper method of fire fighting and other Emergency Response Team personnel trained in the proper methods of fire fighting. All untrained personnel will be required to leave the area. In addition, the Emergency Coordinator directs all cleanup operations, determines the level of personnel protective equipment needed, and decides on the appropriate cleanup materials.

The Emergency Coordinator is responsible for:

1. Determination of life-threatening potential.
2. Determination of property-threatening potential.
3. Determination of environmental impact potential.

On-site fire fighting equipment that will be used to control fires/explosions will include:

1. Hand-held fire extinguishers present on company-owned vehicles and throughout the facility.

2. On-site mobile fire fighting equipment, including, pickup truck with hose reels, water truck, and earth-moving equipment capable of smothering a fire with earthen materials.

Clean up of fire residuals involving hazardous wastes is aimed at collecting as much of the hazardous waste as possible for disposal. Several techniques are available for on-site cleanup, and the use will be determined at the time of the incident, taking into account the extent of the cleanup. Procedures may require the use of sorbents, portable pumps and tank trucks, and/or soil removal equipment. Similarly, the type of personnel protective equipment depends upon the type of material(s) involved.

All waste generated from post-fire cleanups involving hazardous waste is placed in drums or collected in vacuum trucks, sampled, and disposed accordingly. Any equipment used in cleaning fire residuals involving hazardous waste is decontaminated. Any liquid generated from decontamination procedures is drummed or collected in a vacuum truck for proper disposal.

Cleanup alternatives include the following:

1. Sorbents.

2. Direct suction pumping into tank trucks using pumps which are driven by explosion- proof motors. Consideration will be given to applying a blanket of fire fighting foam to control vapors.

3. Soil covering is an initial rapid response method for the removal of a contaminant. Soil that is used at a spill site must be properly disposed.

Civil Unrest Action Procedure

This procedure is to be followed should the facility be impacted by a civil disturbance.

The Emergency Coordinator initiates the following actions:

1. Call security to notify them of possible disturbances. If necessary, notify the general manager who may call an immediate conference to determine an appropriate plan of action.

2. Instructions shall be issued to secure all entrances with security officers or managers to control access or egress.

3. If necessary, local law enforcement agencies are notified by security personnel, but summoned to take action only as a last resort.

4. Every reasonable attempt is made to have the demonstrators approached by an EDS manager and inform them that EDS does not permit such activity on its premises, and in a restrained and courteous manner request that they leave.

5. If necessary, a restraining order is prepared as soon as possible.

Natural Disaster Procedure

This procedure is be followed in the event of an emergency caused by severe weather,

such as tornado, and high-intensity thunderstorms, earthquakes, or flooding. The Emergency Coordinator directs and controls the following remedial actions if they can be accomplished without unduly endangering lives:

1. Visually inspect area to ascertain structural integrity of structures.
2. Close windows and doors.
3. Close open containers and move any containers on unloading docks to staging areas.
4. Instruct employees to proceed to designated safety areas.

Storage and Treatment of Recovered Materials

Immediately after an emergency, the EC will collect representative samples of all recovered wastes, contaminated soils, and waters analyzed and characterized. Arrangements for any necessary off-site treatment or disposal will be completed within 90 days of the conclusion of the emergency. Wastewaters to be handled onsite will be stored, treated, acid disposed of immediately. Accumulated materials are containerized to the extent practicable for transportation. If large quantities of a hazardous waste were generated during the emergency cleanup operations, bulk trucks are used to transport this waste as it is excavated, pumped, or made ready for storage, treatment or disposal.

2.77 Post-Emergency Procedures

Post-emergency procedures are designed to prevent recurrence of the incident, to clean up and dispose of residuals, to decontaminate equipment and to provide for personnel debriefing.

Prevention of Recurrence

The EC will take all necessary steps to ensure that a secondary release, spill, fire or explosion does not recur. If the facility stops operations in response to a release, spill, fire or explosion, the EC must ensure that the following procedures are carried out:

- Monitoring of all pressure valves
- Inspection for any leaks or cracks in pipes, valves, and tanks
- Inspection for gas generation
- Isolation of all collected waste materials

Reoccupation of Facility or Emergency Response Hot Zone

The EC after consultation with the General Manager will determine when it is safe to reoccupy the facility.

Personnel Debriefing and Contingency Plan Review

The EC and General Manager and other appropriate personnel will review preparedness and prevention activities, response activities, casualty control and evacuation procedures with all involved personnel. Based on this review, suggestions for revisions to the Contingency Plan will be made to the General Manager. A review for all reportable incidents will be made in writing. The review will be filed with the EDS Incident Report for the specific release, spill, fire and

explosion. A copy of the review will be forwarded to the Safety Department, Environmental Manager and the General Manager.

2.78 Reporting Requirements

Notification must be made to the National Response Center ((800) 424-8802) whenever there is a release of a hazardous substance to the environment in amounts equal to or greater than the "reportable quantity".[1] 40 CFR 264.56 further states that any emergency event requiring the implementation of the Contingency Plan will be reported by EDS in writing within 15 days to the Director of the MDEQ Waste Management Division and the USEPA Regional Administrator.

EDS must follow corporate internal notification procedures. If a release occurs, a report similar to the one required to the MDEQ must be submitted to EDS's corporate office using forms as provided on Figures 2.70-11 and 2.70-12. The information will also be incorporated into the operating record. Any reportable material release shall be reported to MDEQ within two hours of detection.

---

[1] The reportable quantity for hazardous wastewaters at this site is one pound (or about one pint) released to the environment.

EDS must notify the USEPA and/or the MDEQ - WMD, and other appropriate State and local authorities that the facility is in compliance with paragraph (h) of 40 CFR 264.56 before operations are resumed in the affected area(s) of the facility. Figure 2.70-13 provides a follow-up report to be completed and submitted to the EDS General Manager.

Report to MDEQ Waste Management Division and the USEPA Regional Administrator - 40 CFR 264.56 (j)

The incident will be noted in the operating record including the time, date, and details of the incident that required implementation of the Contingency Plan.

Within 15 days after the incident, a written report must be submitted to the MDEQ and the USEPA. The report must include:

1. Name, address, and telephone number of the owner or operator;
2. Name, address, and telephone number of the facility;
3. Date, time, and type of incident (e.g., release, spill, fire, explosion, etc.);
4. Name and quantity of material(s) involved;
5. The extent of injuries, if any;
6. An assessment of actual or potential hazards to human health or the environment, where applicable; and
7. Estimated quantity and disposition of recovered material that resulted from the incident.

Incident Report Forms

Other EDS Incident Report Forms are provided in Appendix 2.70-2.

2.79 Emergency Equipment

The facility will maintain an alarm system, a communication system and an inventory of equipment suitable for emergency response. The on-site equipment will enable facility personnel to react and respond to the majority of emergency incidents which may arise. If needed, supplemental emergency equipment supplies will be available from outside sources. A current equipment inventory list will be maintained in the site Safety Officer's office.

The facility is provided with dry soda ash for use in decontamination and absorbent material for use in controlling and cleaning up a spill. Most of the hazardous wastewater stored and treated at the facility is acidic and, should a spill occur, the soda ash will be used to neutralize the waste. Two bins of these materials will be provided in the unloading and storage areas. Each of these bins will contain ten, 50 pound bags of absorbent material.

Alarm and Communication Systems

The Treatment Building and the Well Houses are equipped with fire detection and alarm systems. The systems can be activated automatically through the use of smoke and heat sensor units or manually by wall-mounted, push-button controls located at various points throughout the building. A master control unit is located at the Security Station. This master unit, upon receipt of a signal from either the smoke/heat sensors or one of the manual activators, sends an electrical impulse which activates the building's evacuation sirens. At the same time, a signal is sent

through a special telephone line to an outside communication service which quickly contacts/ dispatches the local fire department. A second call is initiated directly to security at the facility to inform site personnel of the alarm.

The facility will be equipped with a communications network to link both on-site and off-site resources. Off-site communications will be available via the telephone system. The telephone system will serve as the primary means of communicating with external emergency response units such as the Fire Department, Police Department, etc. All telephones can be used for this purpose. All of the phones have a listing of required emergency contact phone numbers which would be reviewed for assistance in the event of an emergency. These phone numbers will be on laminated paper and attached to the wall by the phone. Telephones will be located in the following buildings and treatment areas shown on Figures 2.70-14 and 2.70-15.

Treatment Building
Office Building
Laboratory
Security Station
Control Room
Filter Press Area
Container Handling Area

The two-way radio system will be used for intra-and extra-site communications in the event of a power failure. In addition, a messenger will be sent to outside agencies, as required.

When off-site emergency response assistance is required from a government jurisdiction such as the Fire Department, the EC or the designated Communications Coordinator shall ensure that the

gency's Incident Commander is provided with a two-way radio.

ersonnel are dressed out in personnel protective equipment, the following methods of unication will be maintained where practicable during emergency response activities:

1. Two-way radio.
2. Respirators with voice activated speaking diaphragms and/or two-way radios .
3. Hand signals which are universally understood or which are discussed by the emergency response team members prior to entering the hot zone.

n-Site Equipment

mergency response equipment available on site is listed on Table 2.70-4. The on-site location of which is also shown in Table 2.70-4. Intended uses for this equipment are outlined on Table 2.70-5.

- ABC type extinguishers
- Emergency eyewash and shower units
- Personal safety and protective equipment
- First aid stations
- Weather station/wind sock

Various types of fire extinguishers, all rated for fire types A, B, or C, are located throughout the facility as shown in Table 2.70-4 and Figures 2.70-14 and 2.70-15. Water will be supplied by the public water supply. Spigots for hoses will be located throughout the facility. Eyewash and safety showers are located in areas with potential for personal contact with wastes, as shown on Figures 2.70-14 and 2.70-15.

Respiratory protective equipment is available at locations throughout the facility as listed on

Table 2.70-4 and Figures 2.70-14 and 2.70-15. The equipment consists of:

- 30 minute SCBA
- Extra 30 minute cylinders
- Cascade filling station
- MSA Disposable cartridges
- Respirator, AG/OV/Dust/Mist pre-filter
- Air supply line respirators

A first aid station will be located on the floor of the Treatment Building, the Security Station and the Office. Large industrial first aid and medical oxygen cabinets are located throughout the facility.

All employees will be issued the following safety equipment. This equipment will be worn when performing work in areas where there in a possibility of exposure to hazardous wastes.

- Chemical resistant rubber suits (PVC)
- Chemical resistant boots (PVC)
- Full face cartridge respirators (air purifying) acid gas/organic vapor
- Full face shield with attachment when one-half face respirators used
- Chemical resistant gloves
- SCBA's or supplied air respirators where air monitoring or safe work practices require a high level of respiratory protection.
- EDS employees will not be assigned to work in an atmosphere immediately dangerous to life or health.
- Level B and Level C Personal Protective Equipment will be assigned according to the hazard presented by the emergency.
- Boots, gloves and chemical suits are considered disposable after a spill requiring the activation of the Contingency Plan.

A weather station and wind sock will be located along the west fence line to provide site officials with pertinent weather information such as wind direction and velocity, rainfall, etc. This wind sock, which is illuminated at night, is a reliable device to site personnel in determining wind

direction and approximate velocity.

Off-Site Resources

Supplemental emergency equipment, supplies, contracting services will be available, if needed, from off-site sources. The Fire Departments are fully equipped and trained to respond to incidents at the facility. Back-up resources, including an aerial truck are available from adjacent cities.

The facility will be serviced by the county-wide Emergency Medical Service system and a private provider. Both services are fully-equipped and personnel are trained in all aspects of basic and advanced life support procedures and rescue techniques. The following contractors may be contacted by EDS for assistance:

PRIMARY

1. K & D Industrial Services, Inc.
   Romulus, Michigan
   (313) 729-3350
2. Power Vac Service, Inc.
   Detroit, Michigan
   (313) 841-5800

SECONDARY

1. Vac All Services
   Taylor, Michigan
   (313) 729-5519
2. Marine Pollution Control, Inc.
   Detroit, Michigan
   (313) 976-3350

Agreements with the primary cleanup contractors are provided in Appendix 2.70-3.

2.710 Arrangements with local authorities and other resources

EDS has made contact with those local and regional agencies listed in this section which may be involved in an emergency situation. Each of these agencies will have been provided with a current copy of this Contingency Plan and relevant background information. Letters of notification of any changes to the Contingency Plan will be on file at the Romulus facility with acknowledgment of receipts.

The following is a brief description of the responsibilities imposed on EDS and the City of Romulus by Federal and State Solid Waste and HazMat regulations. Successfully meeting these requirements requires the parties conduct a joint review of operations and coordinate, in advance, the actions to be taken in the event of an emergency. It should be noted that EDS has in place, and will continue to maintain, a contract for emergency response services with K & D Industrial Services, Romulus, MI.

As a business operating in Romulus, EDS is required to complete and file standard survey forms with the City's Police and Fire Departments. The Police Department Emergency Contact form includes emergency data information and notification telephone numbers to be used by the Police as needed. The Fire Department forms include a Business Registration Form and a Hazardous Chemicals Survey which are designed to provide information required by MI Public Acts 67 & 80 of 1986, other wise known as the "Fire Fighting Right-To-Know Law".

If a company stores hazardous and/or toxic substances or waste it must provide a list of these materials and their maximum volumes together with other site specific information as apart of the Hazardous Chemicals Survey. If the facility uses or stores any extremely hazardous substances that are regulated by U.S. EPA Title 313 guidelines it must also provide the emergency Coordinator with a Tier II - Emergency and Hazardous Chemical Inventory.

The Fire Department currently maintains a Romulus Emergency Operation Plan for use throughout the City. For each facility or location which submits a Tier II from the Emergency coordinator is required to develop a site specific Off-Site Emergency Response Plan. The objective of this second plan is, "To support and expand the general concept of operation, organization, and tasks for response to a hazardous material incident established in the Romulus Emergency Operation Plan."

The primary emergency authority will be the City of Romulus Fire Department. Arrangements for emergency response will be made with this authority as well as with the Romulus Police Department, state emergency response teams, or emergency response contractors. These agencies will be given copies of the contingency and evacuation plans, as well as Material Safety and Data Sheets. The Henry Ford Hospital will be familiarized with hazardous waste properties and the types of injuries which could result from the treatment process.

The City of Romulus Police will be available for traffic and crowd control as well as carrying out evacuation of local areas. They will be available to assist plant security personnel as needed.

The City of Romulus Fire Departments will respond to fires and other emergency incidents. They will work with plant personnel in fighting large fires and assisting with rescue services. The local hospital is available to provide medical service.

The above mentioned agencies will be familiarized with: the layout of the facility; properties of the hazardous waste handled at the facility and associated hazards; places where facility personnel would normally be working; entrances to and roads inside the facility; and possible evacuation routes via a copy of the Contingency and Emergency Procedures Plan.

2.710.1 Community Emergency Response Organization's Role

It is believed that the communities role in responding to emergencies at the facility will be categorized into the following responses:

- fire suppression
- protect structures from fire impingement
- search and rescue
- medical treatment
- medical transport
- logistical support for breathing air
- manpower for diking activities

2.710.2 Site Emergency Response Level

EDS will respond to environmental or other emergencies to the best of its ability with manpower and/or equipment when called upon by the community.

EDS shall respond to environmental emergencies with available manpower and equipment when the emergency involves materials which the site has had experience handling. For other response scenarios EDS will provide available equipment upon request by the community.

2.710.3 Community Emergency Response Organizations Interface with EDS

In addition to EDS' response capability the community has the following additional response capabilities:

1. **Downriver Emergency Response Team (DERT)**

Downriver Mutual Aid Fire Pact Member Departments

Allen Park	River Rouge	Brownstown Twp	Riverview
Detroit Metro Airport	Rockwood	Ecorse	Romulus
Flat Rock	Southgate	Gibraltar	Taylor
Grosse Ile Township	Trenton Lincoln Park		Woodhaven
Melvindale	Wyandotte		

Organization

Liaisons to Downriver Fire Mutual Aid Chiefs

Chief James Cabadas,
Allen Park Fire Department
Administrative Chief

Chief Dennis Andrew
Woodhaven Fire Department
Assistant Administrative Chief

Executive Board

Sergeant Raymond H. Carpenter
Lincoln Park Fire Department
Team Coordinator

Engineer Eugene Darty
Trenton Fire Department
Training Coordinator

Firefighter Martin Deloach

Allen Park Fire Department
Assistant Team Coordinator

Captain Mark Hammond

Flat Rock Fire Department
Training Coordinator

Firefighter Tim Bosman
Detroit Metro Airport Fire Department
Purchasing Coordinator

Captain John Gregurich
Wyandotte Fire Department
Purchasing Coordinator

Captain Dan Mercure
Rockwood Fire Department
Secretary

Coverage

DERT protects about a half million people in an area of about one hundred fifty square miles. In the Downriver area there are five major railroads, three expressways, a major waterway, a major international airport, and numerous underground pipelines. There are many chemical plants and storage facilities containing a myriad of chemicals under DERT's umbrella of protection. There is a great potential for hazardous materials incidents in the Downriver area. The members of DERT have the training, organization, equipment, and ability to respond to and mitigate most any chemical accident in the Downriver area.

Response Vehicles

Emergency Response Vehicle 1 (ER 1): The Utilimaster truck is housed in the fire station in Allen Park. On board is a computer with information on thousands of chemicals. The computer has the ability to determine where a gas or vapor cloud may travel. Available on ER1 are many reference books containing information on a wide spectrum of chemicals (i.e., chemical properties, chemical hazards, handling guidelines, chemical protective clothing recommendations, etc.). Contained with the vehicle is person protective equipment such as entry suits, breathing apparatus, gloves, and splash suits. The truck also carries chemical and radiological contouring equipment as well as a variety of communication equipment.

Emergency Response Vehicle 2 (ER2): The Dodge Power Wagon 4x4 is housed in a fire station in Riverview. It is equipped with all the decontamination equipment and tools and heavy equipment needed by the Haz. Mat. Team.

Training

Each month DERT members receive three to four hours of training on many aspects of hazardous materials. Many members receive extra training at classes and seminars offered by different colleges, the Michigan State Police Emergency Management Division, and other training facilities. Team members also participate in training exercises with industry.

Brief History

The concept of forming Hazardous Materials Team (Hazmat Team) in the Downriver Wayne County area was first conceived by the Downriver Fire Chiefs in the spring of 1982 because of the large quantity of chemicals used, stored, and shipped through the Downriver area. By the summer of 1982 a thirty-four man Hazmat Team was organized, funded by the Downriver Community Conference, and given the highest level of training available at that time by the Dow Chemical Company of Midland, Michigan.

In the spring of 1983 the Hazmat Tam was called out for its first hazardous materials run: A railroad car full of alcohol had jumped the tracks and tripped over on its side in Woodhaven, Michigan. Since that first run, the Team has successfully responded to numerous transportation accidents (trucks, railroad cars) and accidents at fixed sites (chemical facilities, pipelines), involving potential explosives, compressed gases, flammable and combustible liquids, flammable solids and water reactive chemicals, oxidizers, poisons, corrosives, radioactive products, and unknown chemical.

In 1991 the Hazmat Team changed its name to the Downriver Emergency Response Team (DERT). It now has twenty-seven members: three are trained as specialists, nineteen as

technicians, and five are trained at the operations level.

In September of 1992 the members of DERT completed a joint training program with the Western Wayne County Hazardous Incident Response Team (HIRT). This joint venture, held at the State Police Training Center in Lansing, helped these two teams become familiar with each others men, equipment, and procedures allowing the teams to work better together, if need be, on a hazardous materials incident.

2. **Western Wayne County Hazardous Incident Response Team (HIRT)**

Western Wayne Fire Mutual Aid Association Departments

Canton Township	Dearborn	Dearborn Heights	Farmington Hills
Garden City	Huron Twp	Livonia	Northville
Northville Twp	Plymouth Twp	Plymouth	Novi
Superior Twp	Taylor	Redford Twp	Westland
Ypsilanti Twp	Van Buren Twp	Detroit Metro Airport	Romulus
Wayne			

Organization

Hazardous Materials Committee (liaison to Mutual Aid Chiefs)

Chief Roger Jordan
Detroit Metro Airport Fire Department

Chief Frank Marvaso
Huron Township Fire Department

Chief Gino Polidori
Dearborn Fire Department

Team Coordinator (liaison to Hazardous Materials Committee)

Captain Phil Wagner

Ypsilanti Township Fire Department

Coverage

HIRT protects about 800,000 people in an area of about 350 square miles, an area which includes Western Wayne County and small portion of Washtenaw (Eastern) and Oakland (Southern) Countries. In this area there are four expressways, two major airports, numerous railroads and underground pipelines. There are many facilities that use and store a myriad of chemicals that are under HIRT's umbrella of protection. The numbers of the Western Wayne country HIRT have the training, organization, equipment, and ability to respond to and mitigate most any chemical accident in the Western Wayne County area.

Response Vehicles

HAZ-MAT Response Truck & Trailer: The HAZ-MAT Response Truck is housed at Detroit Metropolitan Wayne County Airport Fire Department. This truck tows the HIRT trailer. These vehicles are used to store and transport the equipment (i.e., entry suits, breathing apparatus, gas monitors, decontamination station, etc.), hardware (tool, tank patch kits, etc.), and supplies (i.e., overpack drums, absorbents, etc.) used by the HIRT.

Mobile Command Post Vehicle (MCPV): The MCPV is also housed at the Metro Airport Fire Station. This vehicle is used to store and transport mixed, mobile, and portable radio and cellular telephone communication equipment, and a library of reference books containing information a wide spectrum of chemicals (i.e., chemical properties, chemical hazards, handling guidelines, chemical protective clothing recommendations, etc.).

Training

The HIRT Training Officer coordinates and implements training programs, most of which are provided by Team members who have attended selected classes and seminars offered by different colleges, the Michigan State Police Emergency Management Division, and other training facilities throughout the state of Michigan and across the country. Outside agencies have been brought in to conduct "hands on" training programs for the HIRT. Team members also participate in training exercises with industry.

Brief History

In the summer of 1988 the HIRT was called out for its first hazardous materials run: A tanker full of gasoline had been involved in an accident which resulted in gasoline spilling onto the road and into the sewer system in Westland, Michigan. Since that first run, the HIRT has successfully responded to numerous transportation accidents (trucks, railroad cars) and accidents at fixed chemical facilities, involving potential explosives, flammable and combustible liquids, flammable solids and water reactive chemicals, oxidizers, poisons, corrosives, and unknown chemicals.

In September of 1992 the members of HIRT completed a joint training program with the Downriver Emergency Response Team (DERT). This joint venture, held at the State Police training Center in Lansing, helped these two teams become familiar with each others men, equipment, and procedures allowing the teams to work better together, if need be, on a hazardous materials incident.

3. **Health Emergency Medical Services, Inc. (HEMS)**

The principal goal of HEMS is to provide and support the provision of high quality emergency pre-hospital care.

HEMS is a 14 hospital corporation designated by the Michigan Department of Public Health to oversee the pre-hospital care system in Western and Downriver Wayne County. Through their involvement in HEMS, these hospitals have shown how cooperation can develop and maintain a pre-hospital emergency system of which we can all be proud.

The core of HEMS responsibility is the operation of the ambulance to hospital emergency medical radio system. The radio operations based at Annapolis Hospital Westland Center, 2345 Merriman Road, Westland, Michigan, 48185. In addition to providing normal day to day radio operation, HEMS radio facilitates the coordination of patient transports and medical information between Health Department officials located at the Wayne County Emergency Operation Center, the on scene Incident Command Post, and the hospital emergency rooms during a mass casualty disaster.

HEMS continues to provide leadership in the training and continuing education of the paramedics and emergency medical technicians. The Wayne County Medical Control Board, a part of HEMS, has developed standard medical procedures for pre-hospital care.

The following HEMS member hospitals are participating in CHEMSET:

Annapolis
Garden City
Botsford
Heritage
Seaway
Oakwood
Providence

Henry Ford Fairlane
Riverside
Wyandotte
Oakwood/Canton
Beyer (Ypsilanti)

EDS Emergency Response Training or interface activities shall, on an annual basis, include one of the following:

- An invitation to local emergency organizations to participate in an EDS site Emergency response drill

- A presentation to local emergency response organizations which discusses the EDS site emergency response plan and the Community Emergency Response Organization's role. The focus of this presentation will be the local fire Departments and emergency medical services group.

2.711 Amendments to Contingency Plan

This Contingency Plan is subject to review and amendment, if:

1. Deficiencies in the Plan are noted.
2. The facility permit is revised.
3. The facility changes in design, construction, operation, or other circumstances develop that change the potential for releases, spills, fires, or explosions of hazardous materials.
4. The list of EC and alternated changes.
5. The list of emergency equipment changes substantially.
6. The applicable regulations are revised.
7. The plan fails in an emergency.

Any significant change in the Contingency Plan that impacts an agency will be reviewed and discussed with that agency or emergency response authority. New contingency plan documents will be prepared and distributed by certified mail to local, state, and federal agencies including

all entities who are current copy holders. Facility personnel will be informed of all changes in the Plan with copies available to personnel responsible for its implementation.

The Vice President of EDS will be responsible for any revisions to the Contingency Plan. Such changes will be required when:

- the facility permit is revised,
- the state or federal regulations are revised,
- the facility changes (in its design, operation, construction or other circumstances) in a way that increases the potential for fires, explosions, or releases of hazardous waste, or hazardous waste constituents,
- the list of emergency equipment changes,
- there is a change in name or position of listed Emergency Coordinators, or
- the plan fails in an emergency.

In addition to the above conditions, to ensure that the plan is always updated, the primary or alternate Emergency Coordinator must review the plan on a regular basis (once every 6 months as a minimum) and compare the information contained in the plan to the information resulting from an inspection of the facility and amend the plan if necessary.

Amendments will be submitted to MDEQ-WMD and all copy holders of the Plan.

TABLE 2.70-1

TYPICAL WASTEWATTERS ACCEPTED AT EDS FACILITY

Waste Type	Typical EPA Hazardous Waste Numbers
Waste Pickle Liquors	D002, F006, K062, D007, U134, U151
Neutral Waters (Brine, Leachates)	D004-D011, all listed wastes
On-site Generated Waters	
F-Solvent Contact Waters	F001-F005

TABLE 2.70-2

EMERGENCY COORDINATOR INFORMATION

Emergency Coordinators (EC)	Home Phone No.	Page Device Phone Number
Austin Marshall (primary)	(313) 240-8733	(313) 708-1785
Michael Mischi (alternate)	(517) 545-7104	(313) 238-3416
Charles Cosgro	(313) 277-6304	(313) 708-2136
Ed Panczyk	(810) 598-0084	(810) 406-6422
Regulatory/Technical		
James Wanzeck	(313) 662-8133	(313) 708-1786
Austin Marshall	(313) 240-8733	(313) 708-1785
Rick Harding	(810) 577-8021	(313) 708-1787

Note: The EC will notify the General Manager (Austin Marshall at **(313) 708-1785**) as soon as possible following any incident.

Addresses for Emergency Coordinators are as follows:

Austin Marshall	15601 Knollwood, Dearborn, MI 48120
Michael Mischi	4095 Royce Ridge, Howell, MI 48843
Charles Cosgro	4957 Roosevelt, Dearborn Hts., MI 48125
Ed Panczyk	52113 Quaker Hill Lane, Chesterfield Twp., MI 48051

TABLE 2.70-3

EMERGENCY CONTACT LIST

Emergency Contacts and Phone Numbers
(To be placed on the wall by each phone at the EDS facility)

EDS Vice President - Austin Marshall, P.E., P.G.		(313) 955-2100 (O) (313) 240-8733 (H)
EDS Operations Manager		to be determined
EDS Site Safety Officer		to be determined
Fire Department		Dial 911
City of Romulus Police Department		Dial 911
Wayne Co. Sheriff	Emergency	(313) 942-2222
State Police		(313) 256-9636
Oakwood Hospital / Ambulance Service		Dial 911
Detroit Poison Control Center		(800) POISON1 (313) 745-5711
CHEMTREC (for information on emergency response involving specific chemicals)		(800) 424-9300
Henry Ford Hospital - Emergency - 24 Hours		(313) 876-2600
National Response Center		(800) 424-8802
MDEQ Pollution Emergency Alert System (PEAS)		(800) 292-4706 (517) 373-7600
MDEQ Information (Waste Management Division)		(517) 373-9523
EPA - Eastern Response Unit (Grosse Ile)		(313) 676-6500
Detroit Water & Sewage Department - Industrial Waste Control		(313) 224-6067
Response Contractors - K&D Industrial Services, Inc.		(313) 729-3350

Give the following information to the notified agencies and authorities:

- Your name and telephone number
- Name and address of the facility
- Time and type of incident (e.g. release, fire)
- Type and quantity of material involved, to the extent known
- The extent of injuries, if any
- Possible hazard to human health or the environment, outside the facility

TABLE 2.70-4

SAFETY/EMERGENCY EQUIPMENT INVENTORY LIST

I. FIRE RESPONSE EQUIPMENT

Definition of Fire Extinguisher Capability:
Type A - Extinguish trash, wood, and paper fires
Type B - Extinguish liquid and grease fires
Type C - Extinguish electrical equipment fires

Location	Type	Quantity	Capability
Security Station	10# Dry chemical Ext.	1	A, B, C
Maintenance store room	10# Dry chemical Ext.	4	A, B, C
	20# CO_2 Ext.	1	B, C
Laboratory	10# Dry chemical Ext.	3	A, B, C
	10# CO2 Ext.	1	B, C
	5# Halon Ext.	2	B, C
	2 ½# Halon Ext	1	B, C
Office Building	10# Dry chemical Ext.	3	A, B, C
	5# Dry chemical Ext.	2	A, B, C
	Pressurized H_2O Ext.	1	A
Unloading Facility	20# Dry chemical Ext.	8	A, B, C
Storage Tanks	10# Dry chemical Ext.	5	A, B, C
	5# Dry chemical Ext.	2	A, B, C
	15# CO2 Ext.	2	B, C
Control Room	5# Halon Ext.	2	B, C
Treatment Tanks	20# CO2 Ext.	1	B, C

Vehicles:

All site vehicles are equipped with dry chemical fire extinguishers ranging in size from five (5) pounds to twenty (20) pounds, depending upon the type and size of the vehicle (Ex: pickup truck - 5# ext., dozer - 20# ext.) Each has A, B, and C capability.

TABLE 2.70-4

SAFETY/EMERGENCY EQUIPMENT INVENTORY LIST (Cont.)

II. RESPIRATORY PROTECTION EQUIPMENT

Definition of Respiratory Protection Table: # of minutes refers to the number of minutes of available breathing air in each piece of equipment.

Location	Type	Quantity	Capability
Unloading & Sampling Area	Survivaire Unit (SCBA)	2	30 minutes
Laboratory	Survivaire Escape Pack	1	5 minutes
	Survivaire Unit (SCBA)	1	30 minutes
	MSA Supplied Air Lines	2	
	MSA Supplied Air Lines w/ Escape Pack	6	5 minutes

III. OTHER PERSONAL PROTECTIVE EQUIPMENT/GEAR

Each employee is issued the following items dependent upon duties and job requirements:

	Equipment	Capabilities
1.	Hard hats	Protection of head from bumps and falling objects
2.	Chemical Resistant Rubber Suits	Body protection for chemical exposure
3.	Chemical Resistant Boots	Foot protection for chemical exposure
4.	Cartridge Respirators (air purifying)	Respiratory protection from inhalation of hazardous material
5.	Full Face Shields w/attachment	Face protection for chemical exposure
6.	Splash Goggles	Secondary eye protection from chemical exposure
7.	Chemical Resistant Gloves	Hand protection for chemical exposure
8.	Safety Glasses	Eye protection from flying debris

TABLE 2.70-4

SAFETY/EMERGENCY EQUIPMENT INVENTORY LIST (Cont.)

IV. SAFETY SHOWERS AND EYE WASH STATIONS

Capabilities - Combination eyewash/safety shower are capable of flushing eyes and body to remove chemicals.

Permanent Fixtures:

LOCATION	QUANTITY
Laboratory	Combination SS/Eye Wash
	Eye Wash Unit
Unloading Building	Combination SS/Eye Wash

Portable Units:

LOCATION	QUANTITY
Well house #1	1
Well house #2	1

V. FIRST AID EQUIPMENT AND SUPPLIES

The primary first aid station is located on the second floor in the Truck Unloading Building, and in addition, large industrial first aid and medical oxygen cabinets are located throughout the facility.

VI. OTHER INCIDENT RESPONSE EQUIPMENT

Equipment	Capabilities
Portable Pumps	Cleanup of liquid material release
Pick-up Trucks	Hauling material or equipment to incident site for cleanup purposes
Generators	Providing electric power for tools and equipment at incident site
Dump Truck	Hauling material to incident site for containment or hauling
Front End Loader	Building containment dikes and/or cleanup of released material
Forklift	Hauling containment equipment and/or cleanup equipment to incident sites
Vacuum Truck	Cleanup of material that has been released

TABLE 2.70-4

SAFETY/EMERGENCY EQUIPMENT INVENTORY LIST (Cont.)

Air Compressor	Providing air for pneumatic tools at incident site
Semi Trailers (tankers)	Hauling liquid material that is cleaned up from incident site

Patching & Diking Material

Wooden Stakes & Wedges	Patching materials (temporary)
Dry & Pre-mixed patching materials	Patching materials (temporary)
Portable Supplied Airline	Respiratory protection
Banner Tape	Crowd control
Plastic Sheeting	Dike & decontamination substrate
Sand Bags	Dike material
Poly Drums	Disposal drums
Hand Tools	Various

Environmental Assessment Instrumentation

GX-3	Explosimeter/O_2 Indicator & Calibration Kit
HS-82	H_2S Meter & Calibration Gas
Compur	HCN Meter & Gas Calibrator
Compur	NO Meter & Gas Calibrator
Detector Tubes	Various

TABLE 2.70-5

EMERGENCY EQUIPMENT UTILIZATION CHART

Emergency Equipment	Type of Emergency: Spills			Type of Emergency: Fires			Type of Emergency: Personal Injuries				Type of Emergency			
	Acid Spill	Alkaline Spill	Chemical Spill	Ordinary Combustibles (paper, wood, etc.)	Chemicals (oil & greases, tars, etc.)	Electrical (energized equipment etc.)	Burns	Abrasions Cuts, Scratches	Chemical Splashes	Other Bodily Injuries	Explosion	Toxic Vapors	Toxic Ingestion	Toxic inhalation
Fire Extinguisher Type A				•							•			
Type B					•						•			
Type C						•					•			
Fire Blanket				•	•	•					•			
Hose	•	•	•	•					•		•			
Fire Alarm				•	•	•					•			
Evacuation Alarm	•	•	•									•		
Telephones	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Self-Contained Breathing Apparatus												•		•
Emergency Air Escape Unit												•		•
Emergency Eyewash & Shower									•					
Sulfur Dioxide Detector												•		
Spill Cleanup Kit	•	•	•											
First Aid Kit							•	•	•	•			•	•
Shovel	•	•	•											
Soda Ash	•	•	•											
Flash lights						•								
Protective Clothing														
Hazardous Materials Response Suit		•	•									•		

Emergency Equipment	Type of Emergency: Spills			Type of Emergency: Fires			Type of Emergency: Personal Injuries				Type of Emergency			
	Acid Spill	Alkaline Spill	Chemical Spill	Ordinary Combustibles (paper, wood, etc.)	Chemicals (oil & greases, tars, etc.)	Electrical (energized equipment etc.)	Burns	Abrasions Cuts, Scratches	Chemical Splashes	Other Bodily Injuries	Explosion	Toxic Vapors	Toxic Ingestion	Toxic inhalation
Protective Clothing														
Acid Splash Suits	•											•		
Air Respirator with Cartridges														
Hard Hats	•	•	•	•	•	•						•		
Gloves	•	•	•	•	•	•					•	•		
Boots	•	•	•	•	•	•					•	•		
Goggles	•	•	•								•	•		

040079 - 2/10/2006

INKSTER QUADRANGLE
MICHIGAN—WAYNE CO.
7.5 MINUTE SERIES (TOPOGRAPHIC)

FLAT ROCK NE QUADRANGLE
MICHIGAN—WAYNE CO.
7.5 MINUTE SERIES (TOPOGRAPHIC)

SCALE 1:24 000

CONTOUR INTERVAL 5 FEET
NATIONAL GEODETIC VERTICAL DATUM OF 1929

Environmental Disposal Systems, Inc
Romulus, Michigan

N

Facility Location

LOCATION MAP

FIGURE 2.70-1

DETROIT INDUSTRIAL FREEWAY (I-94)

ZONED MT2

EX. SAN. M.H. RIM 626.60 INV E 610.02 INV W 609.93 INV S 609.77

EX. 12" SAN. SEWER & DITCH

B.M. #1 EX. SAN. M.H. RIM 625.44 INV E 610.50 INV W 610.39

2100 FEET TO INKSTER RD.

PRIMARY EVACUATION ROUTE

LIFT GATE

SECURITY BUILDING

ROLL GATE

PROPERTY LINE

CITRIN DRIVE (70' EASEMENT)

EXISTING FENCE

O.H.U.

HYD

LANDSCAPED BERM

EXISTING GRAVEL DRIVE

EXISTING SUN PIPELINE CO.

GAS

20' LEONARD PETROLEUM PIPELINE ESMT.

OFFICES

FIRE LANE

GENERATORS

AST

DUMPSTER

1/23/03 REVISION

DEEPWELL HOUSES 12' x12' (TYP.)

PUMPHOUSE

2/15/05 REVISION

CONTAINER HANDLING AREA

TREATMENT FACILITY

LOADING DOCK

DETENTION POND SIZED FOR 100 YR. STM.

TRUCK UNLOADING AREA

RAILCAR UNLOADING AREA

"TOTAL OIL CO." GASOLINE STORAGE TANKS

ZONED MT2

"AJAX PAVING" ASPHALT BURNER

B.M. #2 EX. SAN. M.H. RIM 627.42 INV N 608.61 INV S 608.45

EX. 48" SAN. SEWER

GODFREY DRAIN

EX. 20' SAN. ESMT

EX. DRAIN ESMT.

ROLL GATE

(2) EX. 16" PETROLEUM PIPELINE

15' LEONARD PETROLEUM PIPELINE ESMT.

NORFOLK & SOUTHERN RAILWAY CO. (100' R.O.W.)

EX. TRACKS

EX. 8' FENCE

"KERR MANUFACTURING" FACTORY

EMERGENCY ACCESS/EGRESS ROAD

LEVEL, OPEN FIELD VACANT MT2 PROPERTY

ZONED MT2

70' CITRIN DRIVE R.O.W.

PROPERTY LINE

See drawing AD-2002-5R3 for actual rail details

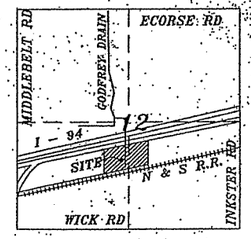
INV. 624.55

EX. 18" CULVERT INV. 624.55

"UNION 76 OIL" GASOLINE STORAGE TANKS

"SHELL OIL CO." GASOLINE STORAGE TANKS

ZONED MT2



LOCATION MAP
Scale 1"=2000'

3 WORKING DAYS. BEFORE YOU DIG CALL MISS DIG 1-800-482-7171

LEGEND

12"S EXIST SAN SEWER / SAN SEWER	EXIST MANHOLE	SECTION CORNER	CULVERT	EXISTING SUN PIPELINE GAS LINE
12"R EXIST STORM SEWER / STORM SEWER	EXIST CATCH BASIN	SOIL BORE	GATEWELL	VEHICLE EVACUATION ROUTE
12"W EXIST WATER MAIN / WATER MAIN	EXIST CULVERT	VALVE IN BOX	FIRE HYDRANT	WETLAND LINE
E EXIST UG ELEC.	EXIST FIRE HYDRANT	EXIST CONTOURS	STORM MH & CB	PROPERTY LINE
GAS EXIST UG GAS	EXIST GATEVALVE	CONTOURS	SANITARY MANHOLE	SILT FENCE
T EXIST UG TELE.	EXIST VALVE IN BOX	EXIST SPOT ELEVATION	BARRIER FREE SYMBOL	O.H.U. OVERHEAD UTILITY
x EXIST FENCE	EXIST LIGHT POLE		SPOT ELEVATION	UNCOVERED RAIN COLLECTION AREA
	EXIST POLE			BUILDING
	EXIST GUY			
	EXIST SIGN			

REV.		
REV.		
REV.		
REV.		
REV.	2/15/05	AS-BUILT
REV.	1/23/03	
	3/20/01	BD

SCALE: 1"=50'-0" | DRAWN BY: JJJ | CHECKED BY: MN | SCALED:

STATE OF MICHIGAN THOMAS A. MANNOIA 12534 REGISTERED PROFESSIONAL ENGINEER

ENVIRONMENTAL DISPOSAL SYSTEMS, INC.
CITRIN DRIVE TREATMENT FACILITY
ROMULUS, MICHIGAN

BASIC SITE PLAN

Ayres, Lewis, Norris & May, Inc.
Engineers • Planners • Surveyors
3950 Research Park Drive
Ann Arbor, Michigan 48108
(734) 761-3010 phone • (734) 761-1200 fax

PROJ. NUMBER: 95440-02

SHEET: C0.01

P:\95440-02\bidset\bidset 3-21-01\C0-01.dwg, 03/22/01 08:50:08 AM, berry

Figure 2.70-2

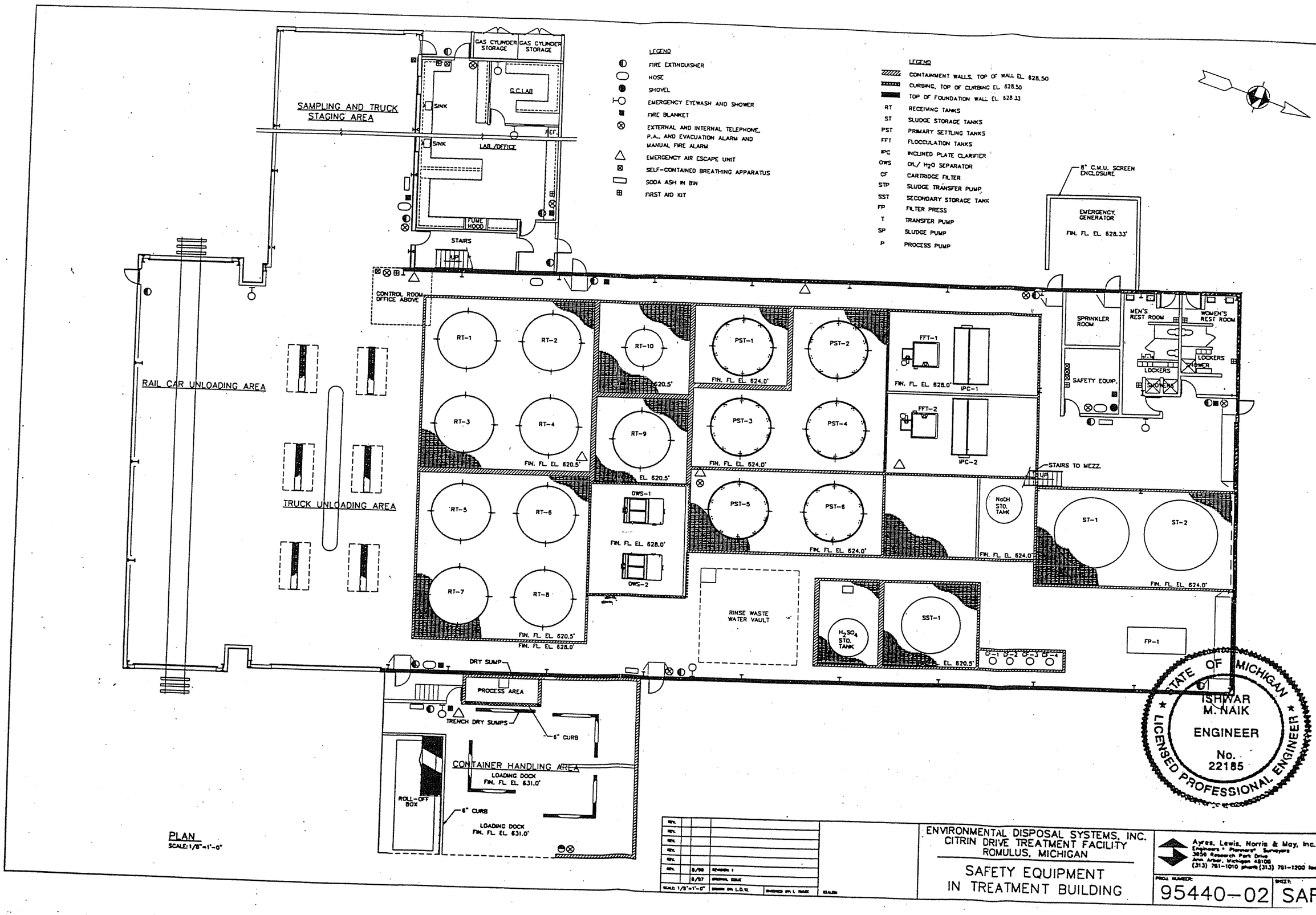

SAMPLING AND TRUCK STAGING AREA
GAS CYLINDER STORAGE
GAS CYLINDER STORAGE
G.C. LAB
SINK
SINK
LAB./OFFICE
REF.
FUME HOOD
STAIRS
CONTROL ROOM OFFICE ABOVE
RAIL CAR UNLOADING AREA
TRUCK UNLOADING AREA
RT-1
RT-2
RT-3
RT-4
RT-5
RT-6
RT-7
RT-8
RT-9
RT-10
FIN. FL. EL. 620.5'
FIN. FL. EL. 628.0'
OWS-1
OWS-2
PST-1
PST-2
PST-3
PST-4
PST-5
PST-6
FIN. FL. EL. 624.0'
FFT-1
FFT-2
IPC-1
IPC-2
FIN. FL. EL. 628.0'
8" C.M.U. SCREEN ENCLOSURE
EMERGENCY GENERATOR
FIN. FL. EL. 628.33'
SPRINKLER ROOM
MEN'S REST ROOM
WOMEN'S REST ROOM
LOCKERS
SHOWERS
SAFETY EQUIP.
STAIRS TO MEZZ.
NaOH STO. TANK
ST-1
ST-2
RINSE WASTE WATER VAULT
H_2SO_4 STO. TANK
SST-1
EL. 620.5'
FP-1
DRY SUMP
PROCESS AREA
TRENCH DRY SUMPS
6" CURB
CONTAINER HANDLING AREA
LOADING DOCK FIN. FL. EL. 631.0'
ROLL-OFF BOX
6" CURB
LOADING DOCK FIN. FL. EL. 631.0'
PLAN
SCALE: 1/8"=1'-0"
LEGEND
FIRE EXTINGUISHER
HOSE
SHOVEL
EMERGENCY EYEWASH AND SHOWER
FIRE BLANKET
EXTERNAL AND INTERNAL TELEPHONE, P.A. AND EVACUATION ALARM AND MANUAL FIRE ALARM
EMERGENCY AIR ESCAPE UNIT
SELF-CONTAINED BREATHING APPARATUS
SODA ASH IN BIN
FIRST AID KIT
LEGEND
CONTAINMENT WALLS, TOP OF WALL EL. 628.50
CURBING, TOP OF CURBING EL. 628.50
TOP OF FOUNDATION WALL EL. 628.33
RT RECEIVING TANKS
ST SLUDGE STORAGE TANKS
PST PRIMARY SETTLING TANKS
FFT FLOCCULATION TANKS
IPC INCLINED PLATE CLARIFIER
OWS OIL/H_2O SEPARATOR
CF CARTRIDGE FILTER
STP SLUDGE TRANSFER PUMP
SST SECONDARY STORAGE TANK
FP FILTER PRESS
T TRANSFER PUMP
SP SLUDGE PUMP
P PROCESS PUMP
STATE OF MICHIGAN
ISHWAR M. NAIK
ENGINEER
No. 22185
LICENSED PROFESSIONAL ENGINEER
ENVIRONMENTAL DISPOSAL SYSTEMS, INC.
CITRIN DRIVE TREATMENT FACILITY
ROMULUS, MICHIGAN
SAFETY EQUIPMENT IN TREATMENT BUILDING
Ayres, Lewis, Norris & May, Inc.
Engineers • Planners • Surveyors
3836 Research Park Drive
Ann Arbor, Michigan 48108
(313) 761-1010 phone (313) 761-1200 fax
PROJ. NUMBER: 95440-02
SHEET: SAF2

Figure 2.70-3

FIGURE 2.70-4

RESPONSE ACTIVITIES

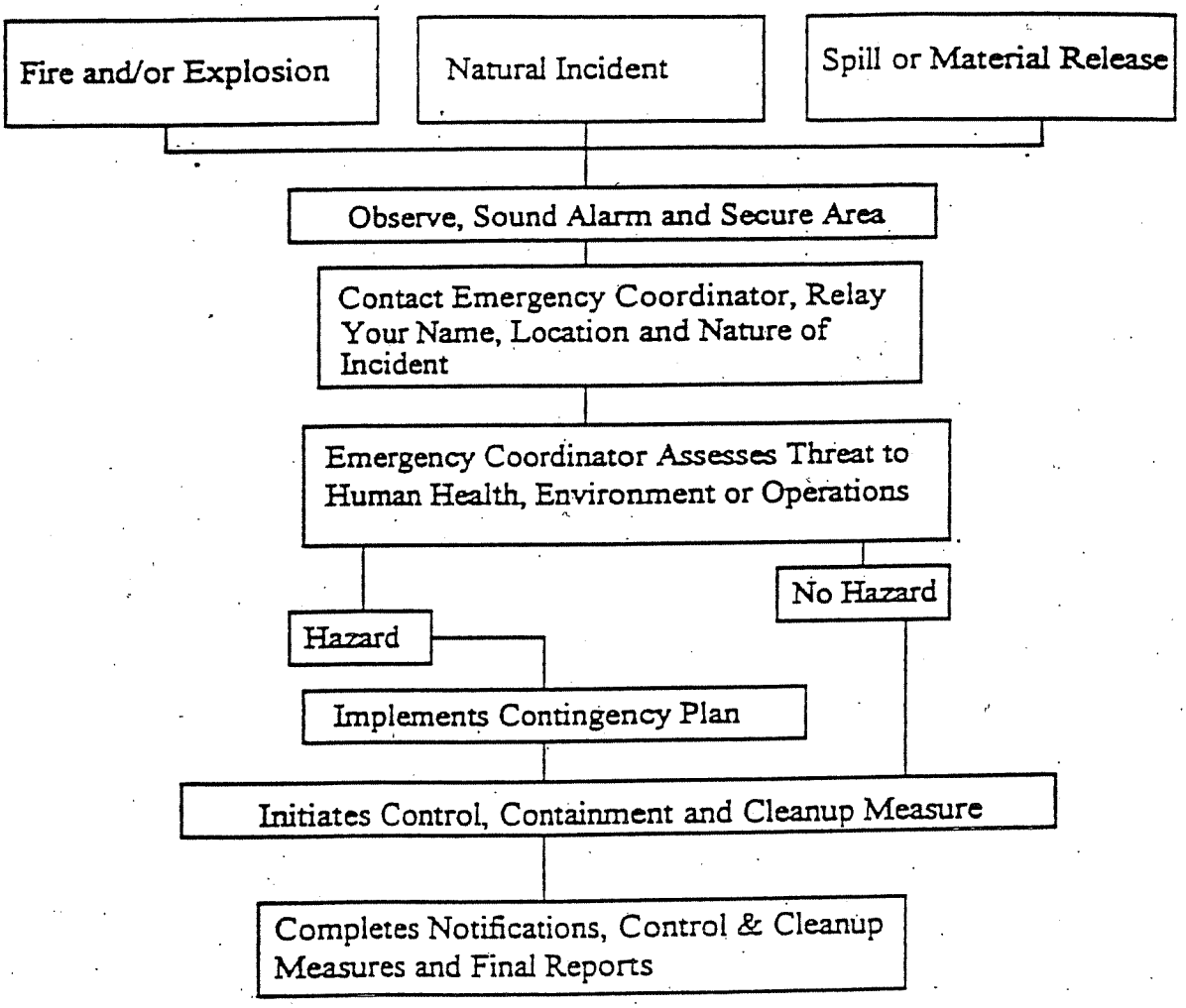


FIGURE 2.70-5
EMERGENCY COORDINATOR DESIGNATION CERTIFICATE

CERTIFICATE

The undersigned, Douglas F. Wicklund, does hereby certify that:

1. He is the duly elected, qualified and acting Secretary of Environmental Disposal Systems, Inc., a Michigan Corporation.

2. Set forth below is a true, correct and complete copy of one or more resolutions duly adopted by the Board of Directors of Environmental Disposal Systems, Inc., by unanimous consent on June 1, 1996.

3. Said resolution(s) have not been modified, amended or rescinded, and are still in force and effect.

RESOLVED: That the Corporation hereby grants to the individual(s) designated as "Emergency Coordinator" in the approved Contingency Plan for the Romulus Facility to commit such of the Corporation's resources as are needed to carry out such Contingency Plan; and

BE IT FURTHER RESOLVED: That such individual(s) designated as "Emergency Coordinator" in such approved Contingency Plan be and hereby are authorized, directed, and empowered to execute and deliver for and on behalf of the Corporation and any such contracts, agreements, documents and memoranda to be necessary and appropriate to execute the herein authorized resolution.

IN WITNESS WHEREOF, the undersigned does hereby set his hand and the seal of said corporation the 1st day of June, 1996

Douglas F. Wicklund

Douglas F. Wicklund
President, EDS

FIGURE 2.70-6

LINES OF AUTHORITY FOR AN EDS DIRECTED ONSITE EMERGENCY RESPONSE

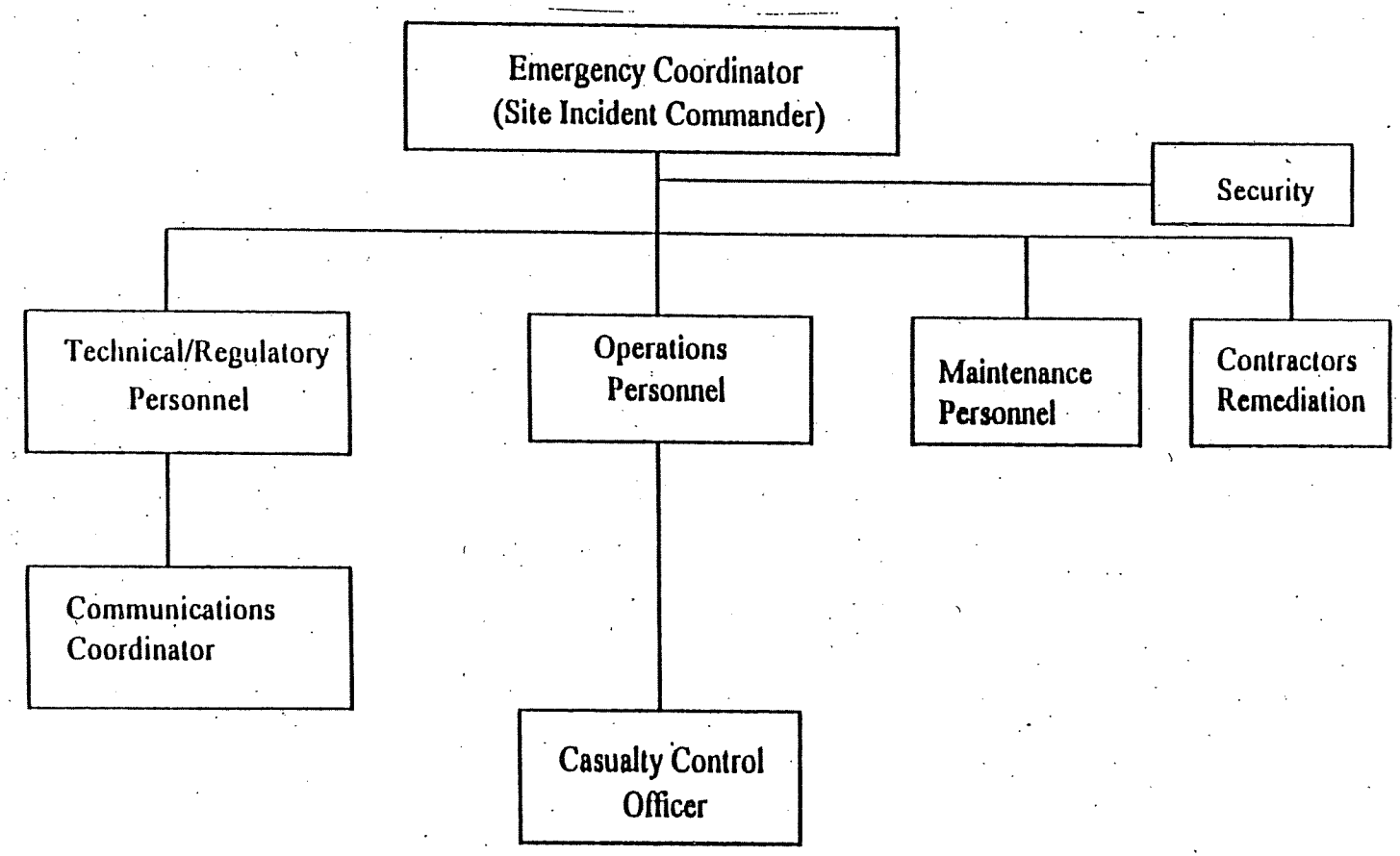


FIGURE 2.70-7

LINES OF AUTHORITY FOR AN ONSITE EMERGENCY RESPONSE REQUIRING ASSISTANCE FROM A GOVERNMENTAL JURISDICTION

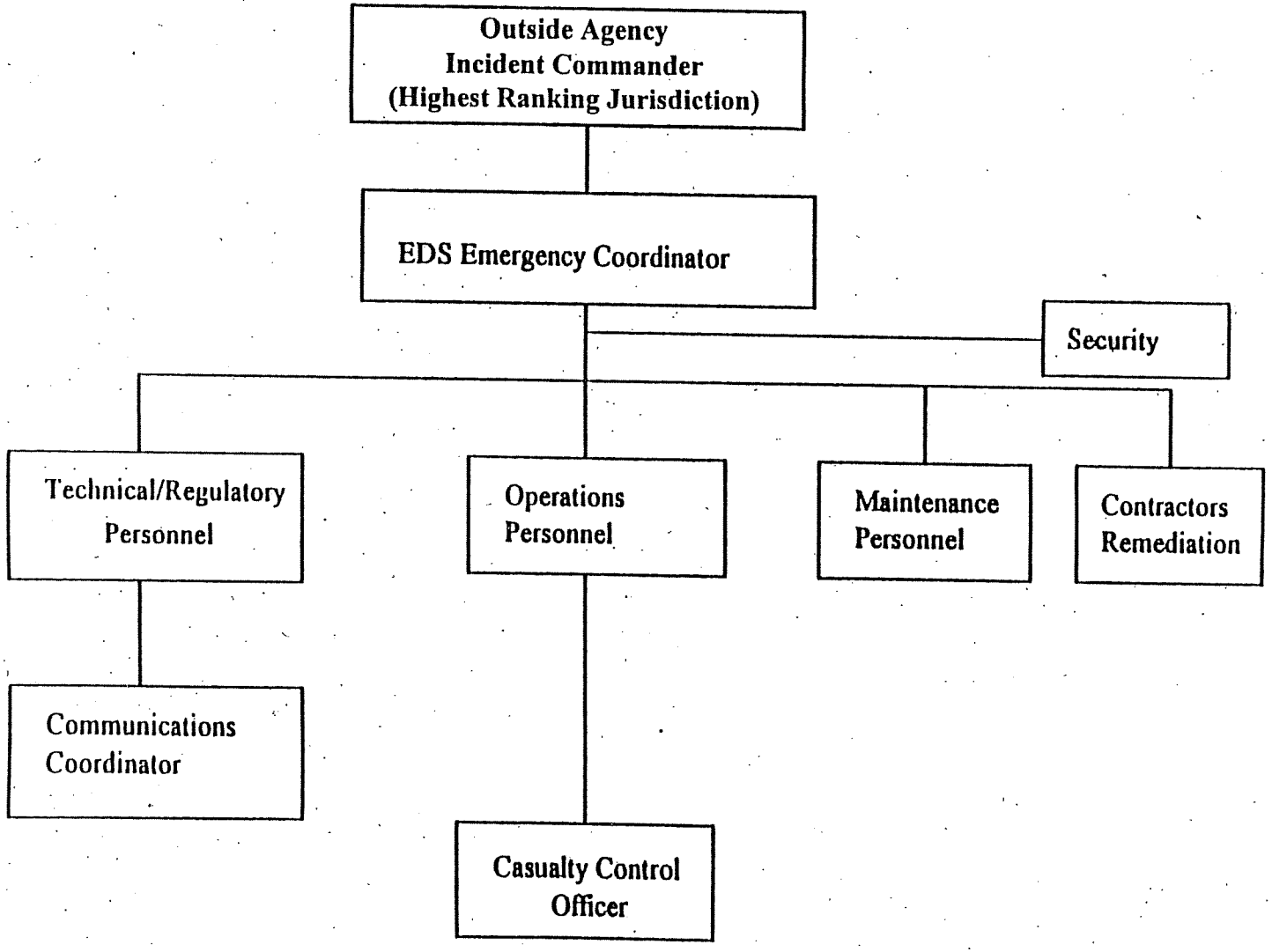
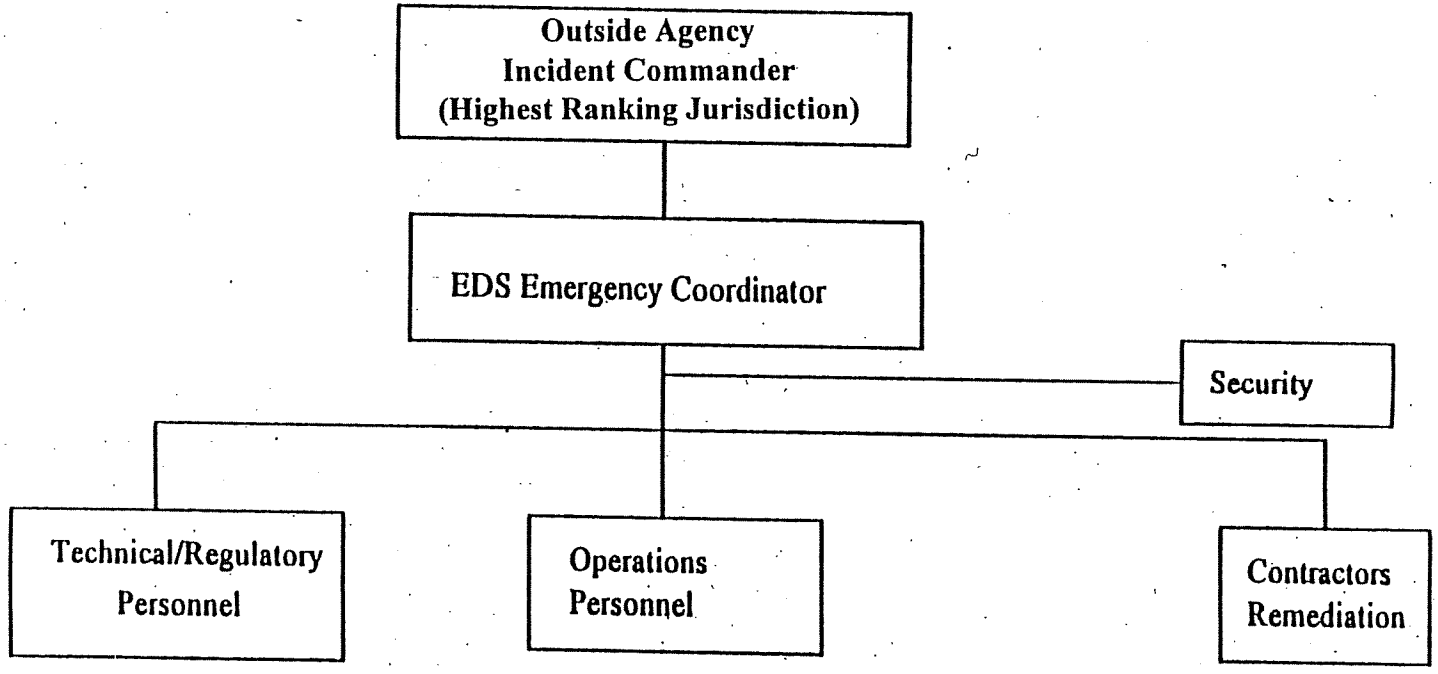
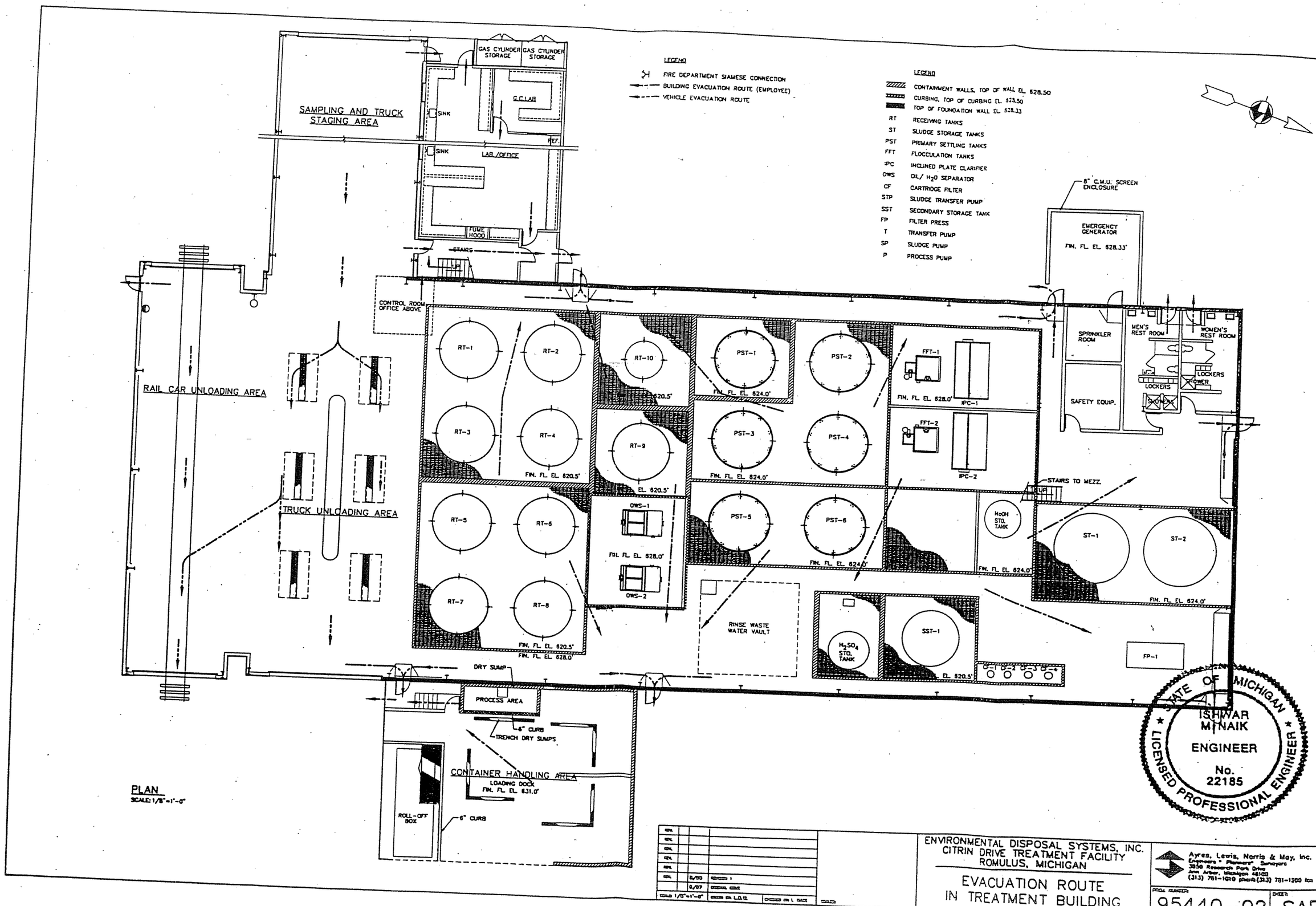


FIGURE 2.70-8

LINES OF AUTHORITY FOR AN EDS OFF-SITE EMERGENCY RESPONSE AT THE REQUEST FROM A GOVERNMENT JURISDICTION



*NOTE: The Incident Commander for Emergency Responses will be the Highest Ranking Official having jurisdiction for a hazardous waste spill. Normally, the local Fire Department Chief will assume the role of the Incident Commander. In the absence of the Fire Chief the Coast Guard, EPA, Michigan State Police or the Sheriff Department (listed here in descending order of jurisdiction) will assume control of the incident until a person of a higher jurisdiction assumes the role of Incident commander.



ENVIRONMENTAL DISPOSAL SYSTEMS, INC.
CITRIN DRIVE TREATMENT FACILITY
ROMULUS, MICHIGAN

EVACUATION ROUTE
IN TREATMENT BUILDING

Ayres, Lewis, Norris & May, Inc.
Engineers • Planners • Surveyors
3950 Research Park Drive
Ann Arbor, Michigan 48108
(313) 761-1000 phone (313) 761-1200 fax

PROJ. NUMBER 95440-02 | SHEET SAF3

Figure 2.70-9

DETROIT INDUSTRIAL FREEWAY (I-94)

ZONED MT2

CITRIN DRIVE (70' EASEMENT)

EX. 12" SAN. SEWER

℄ DITCH

B.M. #1
EX. SAN. M.H.
RIM 627.74
INV E 616.50
INV W 616.38

2100 FEET TO INKSTER RD.

EX. SAN. M.H.
RIM 628.50
INV E 610.02
INV W 609.93
INV S 609.57

EXISTING FENCE

PRIMARY EVACUATION ROUTE

LIST GATE

SECURITY BUILDING

ROLL GATE

PROPERTY LINE

LANDSCAPED BERM

℄ HYD

ROLL GATE

O.H.U.

EXISTING GRAVEL DRIVE

PROPERTY LINE

EXISTING SUN PIPELINE CO.

GAS GAS GAS GAS GAS GAS GAS

20' LEONARD PETROLEUM PIPELINE ESMT.

BLDG

STOR.

OFFICES

FIRE LANE

"TOTAL OIL CO." GASOLINE STORAGE TANKS

ZONED MT2

GENERATORS

AST

DUMPSTER

HYD

1/23/03 REVISION

DEEPWELL HOUSES 12' x12' (TYP.)

PUMPHOUSE

2/15/05 REVISION

CONTAINER HANDLING AREA

TREATMENT FACILITY

LOADING DOCK

DETENTION POND SIZED FOR 100 YR. STM.

TRUCK UNLOADING AREA

RAILCAR UNLOADING AREA

"AJAX PAVING" ASPHALT BURNER

B.M. #2
EX. SAN. M.H.
RIM 627.42
INV N 608.61
INV S 608.45

EX. 48" SAN. SEWER

GODFREY DRAIN

EX. 20' SAN. ESMT

EX. DRAIN ESMT

EMERGENCY ACCESS/EGRESS ROAD

(2) EX. 16" PETROLEUM PIPELINE

EX. 15" LEONARD PETROLEUM PIPELINE ESMT.

NORFOLK & SOUTHERN RAILWAY CO. (100' R.O.W.)

EX. TRACKS

EX. 8' FENCE

"KERR MANUFACTURING" FACTORY

70' CITRIN DRIVE ROW

LEVEL OPEN FIELD
VACANT MT2 PROPERTY

ZONED MT2

PROPERTY LINE

See drawing AD-2002-583 for actual ray locations

INV. 624.55

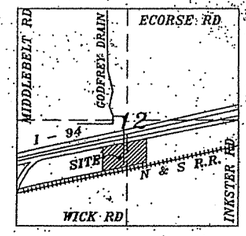
EX. 18" CULVERT

INV. 624.55

"UNION 76 OIL" GASOLINE STORAGE TANKS

"SHELL OIL CO." GASOLINE STORAGE TANKS

ZONED MT2



LOCATION MAP
Scale 1"=2000'

LEGEND

EXIST SAN SEWER	EXIST MANHOLE	SECTION CORNER	CULVERT
EXIST STORM SEWER	EXIST CATCH BASIN	SOIL BORE	GATEWELL
EXIST WATER MAIN	EXIST CULVERT	EXIST CONTOURS	VALVE IN BOX
EXIST UG ELEC.	EXIST FIRE HYDRANT	CONTOURS	FIRE HYDRANT
EXIST UG GAS	EXIST GATEVALVE	EXIST SPOT ELEVATION	STORM MH & CB
EXIST UG TELE.	EXIST VALVE IN BOX	SPOT ELEVATION	SANITARY MANHOLE
EXIST FENCE	EXIST LIGHT POLE		BARRIER FREE SYMBOL
	EXIST POLE		
	EXIST GUY		
	EXIST SIGN		

EXISTING SUN PIPELINE GAS LINE
VEHICLE EVACUATION ROUTE
WETLAND LINE
PROPERTY LINE
SILT FENCE
O.H.U. OVERHEAD UTILITY
UNCOVERED RAIN COLLECTION AREA
BUILDING

REV.		
REV.		
REV.		
REV.		
REV.	2/15/05	AS-BUILT
	1/23/03	
	3/20/01	BD

SCALE 1"=50'-0" | DRAWN BY JJJ | CHECKED BY TMH

SEALED:

STATE OF MICHIGAN
THOMAS A. HANDYSIDE
ENGINEER
15834
REGISTERED Professional ENGINEER

3 WORKING DAYS BEFORE YOU DIG
CALL MISS DIG
1-800-482-7171

ENVIRONMENTAL DISPOSAL SYSTEMS, INC.
CITRIN DRIVE TREATMENT FACILITY
ROMULUS, MICHIGAN

EVACUATION ROUTES AND FIRE HYDRANT LOCATIONS

Ayres, Lewis, Norris & May, Inc.
Engineers • Planners • Surveyors
3950 Research Park Drive
Ann Arbor, Michigan 48108
(734) 761-3010 phone • (734) 761-1200 fax

PROJ. NUMBER: 95440-02

SHEET: C1.00

P:\95440-02\bid\bidset\3-21-01\CO-01.dwg, 03/22/01 08:50:08 AM, barry

Figure 2.70-1D

FIGURE 2.70-11

EDS INCIDENT NO._____

SUPERVISORS/OPERATORS PRELIMINARY INCIDENT REPORT

(to be completed as soon as possible upon discovery of incident)

Date of Incident: _____ Time: _____(am/pm)

Location: _____

Date and Time Detected: _____(am/pm) By:_____

Reported: _____(am/pm) By: _____

Reported to (on-site): _____

See Appropriate Forms - (Circle Applicable One for Each)

Release: YES NO *Injury/Accident*: YES NO *Near Miss/Other*: YES NO

Follow up/Conservative Action: YES NO

EMERGENCY PERSONNEL NOTIFICATION

EC Notified: YES NO Name: _____
Time:_____(am/pm)

Other Site Personnel		**Arrival Times**	
1. _____	Time: _____am/pm	E.C.: _____	am/pm
2. _____	Time: _____am/pm	Other: _____	
3. _____	Time: _____am/pm	_____	

Describe Incident (answer who, what, why, and how): _____

_____

Results of Incident (explain fully - Damage, Losses, etc.): _____

_____

CORRECTIVE MEASURES/RESPONSE ACTIONS

Action to be taken: _____

_____

Date and Time Initial Incident Terminated: _____am/pm By:

_____

Date & Time Remediation and Decontamination Complete: _____am/pm

_____ _____

Supervisor's/Operator's Signature Signature of EC (If applicable)

Distribution: Operations Maintenance Environmental Mgr. General Mgr. Safety Mgr. Incident File

REV. 2, 1-98

FIGURE 2.70-12

EDS INCIDENT NO._____

RELEASE REPORT FORM

Date of Incident: _____/_____/_____ Time of Incident: _____am/pm

1. **Facility:** _____
2. **Telephone Number of Facility:** (_____)_____-_____
3. **Location of Release:** _____
4. a) Name of Substance Released: _____
   b) Amount Released: _____G/T/P/Y (If PT or LB or <10LB on dry pavement, not reportable)
   c) Contained in Bldg. (If yes, no reportable): YES_____ NO _____
   d) Was the Release to: _____ Air, _____ Surface Water, _____ Pavement, _____ Soil ___
   e) Was the Release: _____Continuous, _____Episodic
   f) Was the Release Reportable: YES NO
5. **Cause of Release:** _____
6. **Clean up Procedure:**
   a) Liquid Material (Free-Standing Liquid): _____
      1) Treatment Method (If any): _____
      2) Removal Method: _____
      3) Transferred to: Container Type: _____Container No.: _____
      4) Volume Transferred: _____gallons
   b) Solid Material:
      1) Treatment Method (If any): _____
      2) Removal Method: _____
      3) Transferred to: Container Type: _____Container No.: _____
      4) Volume Transferred: _____lbs/yards
7. **Agencies Contacted:**

Agency	Time/Date	Contact	Phone No.	Comments
IEPA - Local	called: return call:			
Waste Division	called: return call:		(517) 373-0530	
Nat. Resp. Center			(800) 424-8802	
IEPA On-site Rep.			If on-duty or a witness	
U.S. Coast Guard*			(313) 568-9580	
USEPA Region V*			(312) 353-2197	

* Contact of Release is to Waterway.

_____ _____

Name of EC Signature Date

FIGURE 2.70-13

EDS ROMULUS FACILITY

INCIDENT INVESTIGATION FOLLOW-UP REPORT

DIVISION: _____ LOCATION: _____

SUPERVISOR'S NAME (Completing this form): _____
Incident Date: _____ Incident Time: _____am/pm
Injured Employee's Name: _____
Injured Employee's Title: _____ How long doing job? _____

EMPLOYEES INVOLVED IN THE INCIDENT (name and title):
Name: _____ Title: _____
Name: _____ Title: _____
Name: _____ Title: _____

TASK AND ACTIVITY AT THE TIME OF THE ACCIDENT:
a) General Type of Task: _____
b) Specific Activity: _____
c) Employee was working: Alone: ____ With crew/fellow worker ___ Other ___
Specify: _____

SUPERVISION AT TIME OF INCIDENT: Directly supervised __ Supervision at scene ___
Not supervised _____ Explain: _____

HOURS WORKED THAT DAY PRIOR TO INCIDENT: ____ DAY OF WEEK: _____

LIGHT: Daylight ___ Dawn/Dusk __ Dark-no light __ Dark-artificial light ___Unknown ___

WEATHER: Clear ___ Raining ____ Snowing ____ Fog ____ Sleet ____ Other _____

TEMPERATURE: _____ OTHER CONDITIONS: _____

DESCRIBE HOW EVENT OCCURRED (use additional paper if necessary): _____
_____
_____
_____
_____

FIGURE 2.70-13 (Cont.)

INCIDENT INVESTIGATION FOLLOW-UP REPORT

PREVENTABLE INCIDENT: (was the incident preventable by EDS employee?)

YES _____ NO _____

CORRECTIVE ACTIONS: (employee counseling, retraining, OJT, etc.)

CORRECTIVE ACTION PLAN: (actions to prevent reoccurrence-including target dates & responsibility)

SUPERVISOR: _____ DATE: _____

GENERAL MANAGER: _____ DATE: _____

COMMENTS: _____

HEALTH AND SAFETY MANAGER: _____ DATE: _____

COMMENTS: _____

FIGURE 2.70-13 (Cont.)

INCIDENT INVESTIGATION FOLLOW-UP REPORT

RISK: (evaluation of loss potential, if not corrected)

LOSS SEVERITY POTENTIAL
Major ___ Serious ___ Minor ____

PROBABILITY OF OCCURRENCE
High ____ Medium ____ Low _____

IMMEDIATE CAUSES: (use additional paper, if necessary, to describe facts, conditions, environment, etc.

UNDERLYING CAUSES: (training, management, personal factors, maintenance etc.)

MANAGEMENT CONTROL

1.	Leadership and Administration	P____	S____	C____
2.	Management Training	P____	S____	C____
3.	Planned Inspections	P____	S____	C____
4.	Task Analysis and Procedures	P____	S____	C____
5.	Accident / Incident Investigation	P____	S____	C____
6.	Task Observations	P____	S____	C____
7.	Emergency Preparedness	P____	S____	C____
8.	Company Rules	P____	S____	C____
9.	Accident / Incident Analysis	P____	S____	C____
10.	Employee Training	P____	S____	C____
11.	Personal Protective Equipment	P____	S____	C____
12.	Health Control	P____	S____	C____
13.	Program Evaluation System	P____	S____	C____
14.	Engineering Controls	P____	S____	C____
15.	Personal Communications	P____	S____	C____
16.	Group Safety Meetings	P____	S____	C____
17.	Off-the-job Safety	P____	S____	C____

LEGEND: P = Improve Implementation S = Improve Standard C = Improve Compliance

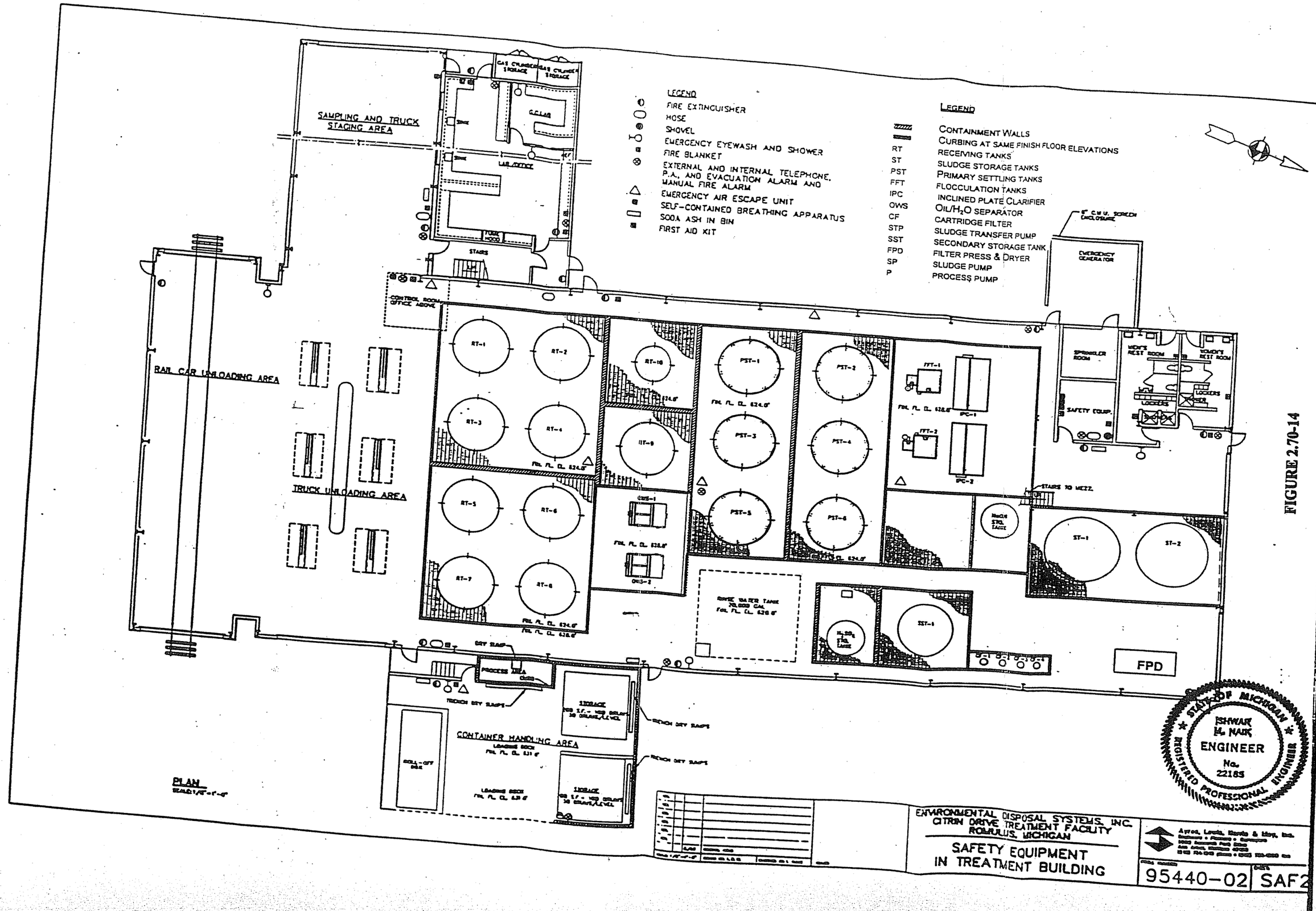


FIGURE 2.70-14

REV 2 1-98

DETROIT INDUSTRIAL FREEWAY (I-94)

ZONED MT2

EX. 12" SAN. SEWER

℄ DITCH

B.M. #1
EX. SAN. M.H.
RIM E 627.40
INV E 616.50
INV W 616.38

2100 FEET TO INKSTER RD.

EX. SAN. M.H.
RIM E 626.50
INV E 610.02
INV N 609.12
INV S 609.37

EXISTING FENCE

CITRIN DRIVE (70' EASEMENT)

PRIMARY EVACUATION ROUTE

LIFT GATE

SECURITY BUILDING

ROLL GATE

PROPERTY LINE

LANDSCAPED BERM

℄ HYD

ROLL GATE

EXISTING GRAVEL DRIVE

O.H.U.

GAS

EXISTING SUN PIPELINE CO.

20' LEONARD PETROLEUM PIPELINE ESMT.

OFFICES

RADIO

FENCE

O.H.U.

FIRE LANE

ZONED MT2

"TOTAL OIL CO."
GASOLINE STORAGE TANKS

GENERATORS

AST

DUMPSTER

HYD

HYD

1/23/03 REVISION

DEEPWELL HOUSES 12' x12' (TYP.)

PUMPHOUSE

FIRE LANE

℄ HYD

2/15/05 REVISION

CONTAINER HANDLING AREA

TREATMENT FACILITY

LOADING DOCK

DETENTION POND SIZED FOR 100 YR. STM.

TRUCK UNLOADING AREA

RAILCAR UNLOADING AREA

O.H.U.

"AJAX PAVING"
ASPHALT BURNER

B.M. #2
EX. SAN. M.H.
RIM 627.42
INV N 608.61
INV S 608.45

EX. 48" SAN. SEWER

GODFREY DRAIN

70' CITRIN DRIVE ROW

EX. 20' SAN. ESMT

GODFREY DRAIN ESMT

℄ HYD

ROLL GATE

(2) EX. 16" PETROLEUM PIPELINE

15' LEONARD PETROLEUM PIPELINE ESMT.

EMERGENCY ACCESS/EGRESS ROAD

NORFOLK & SOUTHERN RAILWAY CO. (100' R.O.W.)

EX. TRACKS

"KERR MANUFACTURING" FACTORY

EX. 8' FENCE

LEVEL OPEN FIELD
VACANT MT2 PROPERTY

ZONED MT2

PROPERTY LINE

See drawing AD-2002-583 for actual rail design

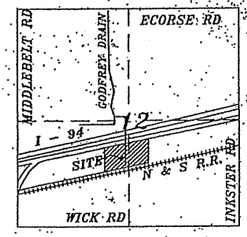
INV. 624.55

EX. 18" CULVERT
INV. 624.55

"UNION 76 OIL"
GASOLINE STORAGE
TANKS

"SHELL OIL CO."
GASOLINE STORAGE
TANKS

ZONED MT2



LOCATION MAP
Scale 1"=2000'

3 WORKING DAYS BEFORE YOU DIG
CALL MISS DIG
1-800-482-7171

LEGEND

12"S — EXIST SAN SEWER	EXIST MANHOLE	SECTION CORNER	CULVERT
SAN SEWER	EXIST CATCH BASIN	SOIL BORE	GATEWELL
12"R — EXIST STORM SEWER	EXIST CULVERT	EXIST CONTOURS	VALVE IN BOX
STORM SEWER	EXIST FIRE HYDRANT		FIRE HYDRANT
12"W — EXIST WATER MAIN	EXIST GATEVALVE		STORM MH & CB
WATER MAIN	EXIST VALVE IN BOX	CONTOURS	SANITARY MANHOLE
E — EXIST UG ELEC.	EXIST LIGHT POLE		BARRIER FREE SYMBOL
GAS — EXIST UG GAS	EXIST POLE	EXIST SPOT ELEVATION	SPOT ELEVATION
T — EXIST UG TELE.	EXIST GUY		
x — EXIST FENCE	EXIST SIGN		

EXISTING SUN PIPELINE GAS LINE			
VEHICLE EVACUATION ROUTE			
WETLAND LINE			
PROPERTY LINE			
SILT FENCE			
O.H.U. — OVERHEAD UTILITY			
UNCOVERED RAIN COLLECTION AREA			
BUILDING			

REV.		
REV.		
REV.		
REV.		
REV.	2/15/05	AS-BUILT
REV.	1/23/03	
	3/20/01	BID

SCALE 1"=50'-0" | DRAWN BY JJJ | CHECKED BY JMN | SCALED:

STATE OF MICHIGAN
THOMAS A. HANDYSIDE
ENGINEER
NO. 19834
Registered Professional Engineer

ENVIRONMENTAL DISPOSAL SYSTEMS, INC.
CITRIN DRIVE TREATMENT FACILITY
ROMULUS, MICHIGAN

EVACUATION ROUTES AND FIRE HYDRANT LOCATIONS

Ayres, Lewis, Norris & May, Inc.
Engineers • Planners • Surveyors
3959 Research Park Drive
Ann Arbor, Michigan 48108
(734) 761-3010 phone • (734) 761-1200 fax

PROJ. NUMBER: 95440-02

SHEET: FIGURE 2.70-15

(C1,00)

P:\95440-02\bid\bidset\bidset 3-21-01\C0-01.dwg, 03/22/01 08:50:08 AM, kerry

APPENDIX 2.70-1

PROCESS-SPECIFIC PROCEDURES

OVERVIEW

This appendix provides a process-specific Contingency Plan for each of the waste storage, treatment, and disposal unit, at the facility. Periodically, this appendix will be revised to reflect changes, modifications or additions to the units described. Following a short introduction for each unit, a description of the general safety and operating rule s followed to prevent and be prepared for emergencies is provided. Following this, a list of response criteria is given. These criteria will be used to determine whether an emergency exists and whether response action should be implemented. Finally, the procedures that will be followed to respond to emergencies are provided.

VEHICLE RECEIPT AND SAMPLING STATION

INTRODUCTION

The Vehicle Receipt and Sampling Station is located next to the laboratory in the Treatment Building. Vehicles enter the sampling area of the Treatment Building through the west entrance doors after being directed to this area by security .The truck positions have concrete curbs and slabs and provide containment in the event of minor spills. Further, the slabs are sloped longitudinally to a low point at the mid-length of each position. If a serious leak should even occur, an empty truck would be parked alongside, in the adjacent position, and the contents rapidly pumped into it. Spillage retained by the slab would be pumped into one of the facility's spill-control tanks for temporary storage and proper disposal.

Manifest and shipping papers of each waste load are checked here. the truck is inspected to ensure valves and hatches are closed and that no leaks are evident . The truck then proceeds to the scale where it is weighed. the truck then proceeds to the truck Unloading Facility.

GENERAL SAFETY AND OPERATING RULES

The vehicle is positioned on the slab under the direction of the Unloading Operator or Technician, and carefully inspected for potential leaks. The Unloading Operator or Technician is required to wear protective clothing when inspecting the truck. It is also inspected for damage to the truck's tank, valves, or undercarriage that might lead to difficult unloading. Assuming no defects are found, the Unloading Operator or Technician then proceeds with verifying the paperwork.

B. Spills or Material Releases

- Leaks or spills from tanks or appurtenant piping, valves, or pumps
- Overflow of a tank
- Pipe breaks during transfer of liquid into or out of a tank
- Gaseous emissions from a tank (from the pressure-relief valve or otherwise)

RESPONSE PROCEDURES

A. Fire and Explosions

- Evacuate personnel from the unit and vicinity.
- Equip all response personnel with appropriate protective clothing and self-contained breathing apparatus.
- Shut off valves, pumps, and electrical service, as appropriate.
- Use foam and/or dry chemicals on the fire itself.
- Cool adjacent tanks, equipment, and buildings with water.
- If fire is not controlled in 5 minutes, call for outside assistance and initiate facility evacuation plan.
- When emergency is over, clean up affected area, put response equipment back in readiness, and restock emergency response supplies.
- If a tank has exploded, immediately evacuate the facility and respond to any fire as described above and/or respond to spillage of waste as described below.

B. Spills of Material Releases

- Shut off valves, pumps and electrical equipment, as appropriate.
- Equip response personnel with appropriate protective gear.
- If the tank itself is leaking of overflowing, remove the wastes to another tank or tank trailer(s).
- If a valve, pipe, or pump is leaking or spilling, isolate this equipment by shutting off appropriate valves.
- Clean up area affected by the release, repair, or replace the tank or equipment, clean up and decontaminate response equipment, and restock emergency response supplies.

VEHICLE UNLOADING FACILITY

INTRODUCTION

This facility consists of: The unloading area, the receiving sumps, the waste head carbon system, and the oil/water separators.

The unloading area has two (2) interior sampling/unloading bays at its west end. The floors of each are sloped to sumps located to one side of the bay about midway along the length of the bays. Each of the hose connections will be dedicated for extended periods, along with one of the waste receiving sump vessels, to receipt of a particular group of mutually compatible wastes. Problems with mixing of incompatible wastes in the unloading portion of the facility will thereby be avoided. the incoming wastes in the four waste receiving tanks will then be pumped to the various sections of the treatment tanks, as determined by processing requirements based on laboratory tests.

The unloading bays also have an internal washing system, consisting of a spray nozzle hung from a track mounted near the ceiling. After the vehicle has been unloaded, this nozzle is lowered into the vehicle's hatch and turned on for a set period. The wash water is drained out through the still-connected hose into the sand interceptors and waste receiving sump vessels.

The truck unloading wash building also has one (1) bay at its west end that contains a rack and spray system for washing the truck exteriors. The semi-automated system sprays a solution at the top, bottom, sides, front, and rear of a vehicle to clean off road dirt and any other adhering material. The makeup water is from the facility's on-site process water well. The dirty wash water is collected in sumps under the truck rack, pumped to a nearby storage tank, screened, and later reused for the interior was mentioned above.

The waste-head carbon unit draws vapor, under a slight vacuum, from the head-space above the liquid in the , the solids settling tank, and all of the major waste storage and treatment tanks. The duct carrying this vapor goes into the bottom of a packed scrubbing tower and is then discharged through a tall stack. A recirculating caustic solution is sprayed into the top of the scrubbing tower, removing most of the offensive gaseous components, and flows out the bottom of the tower to the holding tank for recirculation.

Settled solids collecting in the conical bottom of unloading tank can also be pumped, as a slurry, into the filter press system.

The waste vehicle must first be positioned in the unloading bay so as to be entirely within the contained area draining to the sump. From this point on, the EDS personnel must ear full protective clothing. The discharge hose must then be connected to the correct quick nozzle. and to the truck discharge outlet. by the EDS personnel. It is important to realize that each of the four (4) quick-connect nozzles for the receipt of wastes. and the units to which it leads. will normally be dedicated to a particular group of mutually compatible wastes. it is the responsibility of EDS personnel to see that connection is made to the proper nozzle. that is. to one that is compatible with the waste being unloaded. During unloading, or whenever the truck's vehicle's are open (including the periods during internal washing), no smoking, welding, or other spark-generated activities will be permitted near the vehicle.

The operation of the waste receiving tanks is also largely automatic, except for manual setting of valves and of pump operation to move the liquids from the tanks into the major storage and treatment tanks.

Scrubber operation is also essentially continuous and automatic, although periodic checking of scrubber solution pH and composition, blowdown, and makeup and addition of new solution is to be done manually.

RESPONSE CRITERIA

A. Fires and Explosions
- Fire in or adjacent to the unit
- Explosion of the unit

B. Spills or Material Releases
- Leaks or spills from vehicles, tanks, or appurtenant piping, valves, or pumps
- Overflow of a tank
- Hose, coupling, or pipe breaks during loading/unloading operation
- Gaseous emission from a tanker truck

RESPONSE PROCEDURES

A. Fires or Explosions
- Evacuate personnel from the unit and vicinity.
- Equip all response personnel with appropriate protective clothing and self-contained breathing apparatus.
- Shut off valves, pumps, and electrical service, as appropriate.
- Use foam and/or dry chemicals on the fire itself.
- Cool adjacent tanks, equipment and buildings with water.
- If the fire is not controlled in five (5) minutes, call for outside assistance and initiate the facility evacuation plan.
- When the emergency is over, clean up the affected area, put response equipment back in readiness, and restock emergency response supplies.
- If a unit has exploded, immediately evacuate the facility and respond to any fire as described above and/or respond to spillage of wastes as described below.

B. Spills or Material Releases
- Shut off valves, pumps, and electrical equipment, as appropriate.
- Equip response personnel with appropriate protective gear.
- If a tank or tanker truck is leaking or overflowing, remove the wastes to another tank or tank trailer(s).
- If a valve, pipe, hose, or pump is leaking or spilling, isolate this equipment by shutting of appropriate valves.
- Clean up the area affected by the release, repair, or replace the tank or equipment, clean up and decontaminate response equipment, and restock emergency response supplies.

PUMPS AND FILTERS

INTRODUCTION

Pumps and Filters are set on concrete slabs within containments. The slabs generally have cubs all around and floor drains. The containment system is generally adequate to contain most spills.

A variety of pump types (both centrifugal and positive displacement), materials (both corrosion-resistant metals and plastics), and sizes are used, with similarly varying packing and seal mechanisms. Some of the packing and seam mechanisms customarily leak a small amount of the pumped fluid; others require a continuous flushing with a small amount of clean water. Both such flows are contained by the curbing around the pumps and drained to a local sump at the pump house for later transfer to the treatment systems, but such flows should not be confused with spills. Spills are larger, uncontrolled flows resulting fro rupture of pipes or pump casings, or gross failure of the pump packing or seals. Most such spills will be caught by the curbing and drained to the local sump, but prompt action will still be required to address pipe or equipment failure.

The pressure-leaf filters and the recessed-plate filter press are complex pieces or equipment with elaborate cycles of sequential operating steps, which will not be described here. However, particularly with the recessed plat press, leakage of small amounts of waste during filter runs is normal. This occurs because the reseating of the seals between the large number of plates at the start of each filter run is frequently imperfect, but the imperfection does not become apparent until the run is partially completed. The curbing, containment, and drainage system is usually adequate to handle this controlled leakage. Spill control measures are only required when the leakage is large and uncontrolled or when there is an actual rupture of piping or equipment. Also, in the recessed plate filter there are a large number of moving parts, and sometimes a hydraulic system; in either case, the machine contains a substantial amount of lubricating and other oils. Although not in themselves hazardous, leakage of these oils can cause difficulty if they get into the floor drains and are pumped into the treatment system. The hazard comes fro possible reactions with various oxidants in certain wastes, and the simple fire hazard from floating oils.

GENERAL SAFETY AND OPERATING RULES

Pumps and filters may be either manually or automatically controlled. periodic inspections. as detailed in the Inspection Plan. for proper performance, including the absence of excessive waste leakage or any leakage of lubricating or hydraulic oil. is the main operating rule. For manually-operated units. it is desirable to observe the unit briefly after starting (or stopping) it to see that it is functioning properly. If excessive waste leakage is observed. full protective clothing must be put on before approaching the equipment. even to run it off. because in certain cases (such a the jamming of check valves in the open position) shutting of the equipment may not stop the flow of waste from the leak.

RESPONSE CRITERIA

A. Fire and Explosion

- Fire in or adjacent to the pump or filter unit
- Explosion of the unit

B. Spills or Material Releases

- Excessive leaks or spills of waste from pumps or filters, or any leaks or spills from appurtenant piping or valves.
- Leaks or lubricating or hydraulic oil from pumps or filters.

RESPONSE PROCEDURES

A. Fires or Explosions

- Evacuate personnel from the unit and vicinity.
- Equip all response personnel with appropriate protective clothing and self-contained breathing apparatus.
- Shut off valves, pumps, and electrical service, as appropriate.
- Cool adjacent tanks, equipment and buildings with water.
- If the fire is not controlled in five (5) minutes, call for outside assistance and initiate the facility evacuation plan.
- When the emergency is over, clean up affected area, put response equipment back in readiness, and restock emergency response supplies.
- If a unit has exploded, immediately evacuate the facility and respond to any fire as described above and/or respond to spillage of wastes as described below.

B. Spills or Material Releases

- Shut off valves, pumps, and electrical equipment, as appropriate.
- Equip response personnel with appropriate protective gear.
- If a pump, filter, valve, or pipe is leaking or spilling waste, isolate this equipment by shutting off appropriate valves.
- Clean up area affected by the release, repair or replace the tank or equipment, clean up and decontaminate response equipment, and restock emergency response supplies.

SURGE TANKS AND DEEPWELL HEADS

INTRODUCTION

The surge tanks are situated close to the deepwells that they serve. The surge tanks are similar to the major treatment tanks, as are their hazards, operating rules and safety precautions; thus the surge tanks can be handled according the procedures in the section "Major Storage and Treatment Tanks."

The deepwell heads consist of a series of pipes connecting to both the inner casing of the well, which conveys the waste injected into the ground, and the annular space between the inner and outer casings, which contains an inert, immiscible, stationary fluid such as diesel oil. The inner casing is pressurized to about 600 psi, whereas the outer is pressurized to about 700 psi. The annulus filter liquid is pressurized by inert gas (such as nitrogen), from a cylinder of compressed gas, and the interface level between the gas and the liquid is observable in a sight glass. Should a leak develop in either the inner casing (at a level above the injection stratus), or the outer casing, specific perturbations show up in both the annulus liquid level and pressure that are indicative of the type of leak that has developed. Either abnormality will trigger automatic alarms and shutdown of the well.

GENERAL SAFETY AND OPERATING RULES

As most of the equipment and valves on the well head are automatic, the periodic inspections described in the Inspection Plan, along with the automatic alarms, should be adequate to discover any leaks, spill, or other hazardous conditions requiring attention.

RESPONSE CRITERIA

A. Fire and Explosion

- Fire in or adjacent to the well head unit
- Explosion at well head

B. Spills or Material Releases

- Leaks or spills of wastes from the well head or appurtenant piping or valves
- Leaks or spills of annulus filter liquid from piping or valves

RESPONSE PROCEDURES

A. Fires and Explosions

- Evacuate personnel from the unit and vicinity
- Equip all response personnel with appropriate protective clothing and self-contained breathing apparatus.
- Shut off valves, pumps, and electrical service as appropriate.

- Use foam and/or dry chemicals on the fire itself.
- Cool adjacent tanks, equipment and buildings with water.
- If the fire is not controlled in five (5) minutes, call for outside assistance and initiate the facility evacuation plan.
- When the emergency is over, clean up the affected area, put response equipment back in readiness, and restock emergency response supplies.
- If a well head has exploded, immediately evacuate the facility and respond to any fire as described above and/or respond to spillage of wastes as described below.

B. Spills or Material Releases

- Shut off valves, pumps, and electrical equipment, as appropriate.
- Equip response personnel with appropriate protective gear.
- If a pump, filter, valve, or pipe is leaking or spilling waste, isolate this equipment by shutting off appropriate valves.
- Clean up area affected by the release, repair or replace the tank or equipment, clean up and decontaminate response equipment, and restock emergency response supplies.

STORAGE AND TREATMENT TANKS

INTRODUCTION

The Wastewater Treatment System is composed of three parts: storage and treatment tanks, pumps, filters and piping. This section covers the first part; the other parts have been covered in previous sections.

Wastewaters are stored and treated in large tanks during processing. Total tank capacity at the facility for storage is 200,674 gallons.

GENERAL SAFETY AND OPERATING RULES

No incompatible waste or materials are stored in the same tank. No corrosive wastes are stored in tanks that are not specifically designed for these wastes.

All tanks are equipped with pressure and vacuum relief valves as necessary. All tanks are equipped with level-of-liquid indicators and high-level alarms, and all loading operations are performed with foreknowledge of the unfilled capacity of the tank and the quantity of the waste or material to be loaded into the tank.

All valve open/close settings are checked by a supervisor before waste or material transfer into or out of any tank is initiated.

All tanks are located in secondary containment systems designed to hold the capacity of the largest tank. Any liquids in these secondary containment system units are drained to a sump, pumped into a holding tank, and then slowly bled into the treatment system and subsequent disposal in the deep wells.

No smoking, welding, or other spark-generating activities are allowed at or near tank storage units without a permit.

All tanks are equipped with caged safety ladders or railed catwalks, as appropriate, to ensure personnel safety.

The Inspection Plan has been implemented to assure observance of the above procedures, to detect leaks or spills, and to achieve annual testing of tanks.

RESPONSE CRITERIA

A. Fire and Explosion

- Fire in or adjacent to the tank storage unit.
- Tank explosion.

B. Spills or Material Releases

- Leaks or spills from tanks or appurtenant piping, valves, or pumps.
- Overflow of a tank.
- Pipe breaks during transfer of liquid into or out of a tank.
- Gaseous emissions from a tank (from the pressure-relief valve or otherwise).

RESPONSE PROCEDURES

A. Fire and Explosions

- Evacuate personnel from the unit and vicinity.
- Equip all response personnel with appropriate protective clothing and self-contained breathing apparatus.
- Shut off valves, pumps, and electrical service, as appropriate.
- Use foam and/or dry chemicals on the fire itself.
- Cool adjacent tanks, equipment, and buildings with water.

- If fire is not controlled in five (5) minutes, call for outside assistance and initiate the facility evacuation plan.
- When the emergency is over, clean up the affected area, put response equipment back in readiness, and restock emergency response supplies.
- If a tank has exploded, immediately evacuate the facility and respond to any fire as described above and/or respond to spillage of wastes as described below.

B. Spills or Material Releases

- Shut off valves, pumps, and electrical equipment, as appropriate.
- Equip response personnel with appropriate protective gear.
- If the tank itself is leaking or overflowing, remove the wastes to another tank or tank trailer(s).
- If a valve, pipe, or pump is leaking or spilling, isolate this equipment by shutting off appropriate valves.
- Clean up area affected by the release, repair, or replace the tank or equipment, clean up and decontaminate response equipment, and restock emergency response supplies.

CONTAINER HANDLING FACILITY

INTRODUCTION

The proposed Container Handling operations, used 55-gallon drums as a representative container. The Container Handling Facility will handle containerized hazardous wastes to be disposed onsite.

The proposed facility will include a Container Handling Facility. This building will be dedicated to receiving, sampling and analysis, storage, accumulation, staging, and decanting of containerized hazardous wastes, as well as storage, accumulation, and handling of empty drums. The Container Handling Facility will be located as shown on Figure 2.70-2. The Facility will consist of a container staging area, decant unit, laboratory, and storage areas.

Incoming containers of waste will be received and managed in accordance with the Waste Analysis Plan and sorted in this building until adequate lots are accumulated for decanting. The proposed drum storage and staging areas are designed to ultimately hold up to 200 containers in segregated areas. The facility is designed to receive approximately up to 200 drums of waste each day. The containers will be received in truck load lots equivalent to eighty 55 gallon drums. However, smaller truck load lots may occasionally be received.

DESIGN OF CONTAINER HANDLING AREA

The proposed container Handling Facility is a 4-walled one floor structure and will house a staging area, a decant unit, and a storage area. the unit will be a steel frame structure with sheet metal roof and sheet metal siding on all sides. Levied wastes will enter the staging/storage areas through the unloading dock . The storage and staging area will also be accessible from other doors.

Containers will be placed in rows that are two 55-gallon drums wide and two containers high. Rows are designed to be separated by aisles to permit inspection and forklift access. The aisles will also provide sufficient space to remove any containers that may develop leaks during storage. The storage area is designed to comply with the requirements of 40 CFR 264.35 and applicable fire code requirements.

Integrated into the floor of the Container Handling area is a system to contain any liquids which may spill or leak from the containers stored. The containment system consists of storage areas (bays) with 9-inch concrete curbs with sloped floors and sumps. Water stops will be installed at all joints in the concrete. The exposed concrete surface will be coated with non-skid, chemically resistant coatings such as Vinyl Ester Derakene 470/40 or an equivalent (40 CFR 264.175 (b) (1). The concrete floor of the Handling area will be maintained free of gaps and cracks; any gaps or cracks detected in the floor during inspections (see Appendix 3) will be filled and sealed with a chemically resistant material. The surface surrounding the unit will slope down and away to prevent run-on. The roof, gutter system, and siding of the building prevent intrusion by inclement weather.

All concrete floors within the proposed facility are sloped 1/8 inch per foot toward the sump from which any spilled or leaked wastes are removed to tank storage for subsequent treatment. The containment system is designed to hold at least 10 percent of the volume of the containers placed in each storage area. In the event of a spill, the spilled volume will flow on the sloped floor towards the sump. Sumps located in the storage area will contain any spilled wastes. Spills will be removed and pumped to the appropriate decant tank or recontainerized. Sumps will be pumped as soon as possible. in no case longer than once every 24 hours. The drum storage bays have been designed to exceed the containment capacity requirement of 40 CFR 264.175 (b) (3).

Container Decant

The proposed Container Decant unity will be housed in the proposed Container Handling Facility.

Containers of waste, received by the facility, that contain liquid or pumpable wastes to be treated by the processes at EDS, can be decanted to remove these liquid wastes and be placed in bulk tank storage for subsequent treatment. The Waste Receiving Procedures described in the Waste Analysis Plant will be used to verify container contents and ensure compatibility of the wastes being decanted and pumped to the tanks or stored by compatible category for shipment offsite.

Exceptions are containers that hold wastes that cannot be treated by the facility. These containerized wastes will be accumulated in the staging area and transferred to another permitted facility where they can be treated and/or disposed. Appropriate manifesting and waste tracking procedures will be followed in shipping the wastes to another facility.

Containers which have been sampled, analyzed, categorized, and accepted for treatment at the facility, will be transferred by waste class in lots, to the decant station from the storage bays in the staging area. The decanting operation has been designed to accommodate batch processing of classes of liquid wastes (e.g., acids, oily wastes). This facilitates the segregated storage of different classes of wastes and the proper management of potentially incompatible wastes.

GENERAL SAFETY AND OPERATING RULES

Incompatible containers of waste will be stored in separate storage bays. Each bay will have a secondary containment trench which is segregated from all other trenches.

Daily inspections of the container storage and staging areas will be conducted according to the facility's Inspection Plan to minimized risks of spillage and leakage.

All wastes received at the Container Handling facility for storage and shipment offsite will remain in their original containers. Containers that show evidence of leakage or represent a potential leakage problem will be placed in overpacks.

The Container Handling Facility will be fire-protected. The building will be equipped with a vent system which provides air changes for the building via roof vents.

The decant holding tanks associated with the decant operation are located in a secondary containment area with individual concrete dikes designed to hold the volume of one tank.

The decant unit will be ventilated, via fume hoods, to the Container Handling scrubber. The unit will have a spill containment using a sloped floor and sumps which will be blocked to prevent contact of potentially, incompatible wastes. A portable pump will be used to collect and transfer the spilled waste to the appropriate decant holding tank.

RESPONSE CRITERIA

A. Fire and Explosion

- Fire in or adjacent to the Container Handling Facility
- Container explosion

B. Spills or Material Releases

- Container rupture during handling or storage
- Material spillage during decanting

RESPONSE PROCEDURES

A. Fires and Explosions

- Evacuate personnel from the unit and vicinity.
- Equip all response personnel with appropriate protective clothing and self-contained breathing apparatus.
- Shut off valves, pumps, and electrical service as appropriate.
- Use foam and/or dry chemicals on the fire itself.
- Cool adjacent tanks, equipment and buildings with water.
- If the fire is not controlled in five (5) minutes, call for outside assistance and initiate the facility evacuation plan.
- When the emergency is over, cleanup the affected area, put response equipment back in readiness, and restock emergency response supplies.

B. Spills of Material Releases

- Shut off valves, pumps and electrical equipment, as appropriate.
- Equip response personnel with appropriate protective gear.
- If a valve or pipe is leaking or spilling waste, isolate this equipment by shutting off the appropriate valves.
- Clean up the area affected by the release, repair, or replace the leaking pipe, clean up and decontaminate response equipment, and restock emergency response supplies.

APPENDIX 2.70-2

INCIDENT REPORTING FORMS

FORM NO. 1 EDS INCIDENT NO._____

EDS ROMULUS FACILITY

SUPERVISORS/OPERATORS PRELIMINARY INCIDENT REPORT

(to be completed as soon as possible upon discovery of incident)

Date of Incident: _____ Time: _____(am/pm)
Location: _____
Date and Time Detected: _____ (am/pm) By: _____
Reported: _____ (am/pm) By: _____
Reported to (on-site): _____

SEE APPROPRIATE FORMS - (Circle Applicable One for Each)

Release: YES NO Injury/Accident: YES NO Near Miss/Other: YES NO

Follow up/Conservative Action: YES NO

EMERGENCY PERSONNEL NOTIFICATION

EC Notified: YES NO Name: _____ Time:_____(am/pm)

Other Site Personnel **Arrival Times**

1. _____ Time: _____am/pm E.C.: _____am/pm
2. _____ Time: _____am/pm Other: _____
3. _____ Time: _____am/pm _____

Describe Incident (answer Who, What, Why, and How):_____

_____

Results of Incident (explain fully - Damage, Losses, etc.):_____

_____

CORRECTIVE MEASURES/RESPONSE ACTIONS

Action to be Taken:_____

_____

Date and Time Initial Incident Terminated: _____am/pm By: _____

Date & Time Remediation and Decontamination Complete: _____am/pm

_____ _____

Supervisor's/Operator's Signature Signature of EC (If applicable)

Distribution: Operations Maintenance General Mgr. Incident File

Environmental Mgr. Safety Mgr.

FORM NO. 2

EDS INCIDENT NO.____

EDS ROMULUS FACILITY

RELEASE REPORT FORM

Date of Incident ___/___/___ Time of Incident _____ am/pm

1. **Facility:** _____
2. **Telephone Number of Facility:** (____)_____-_____
3. **Location of Release:** _____
4. a) Name of Substance Released: _____
   b) Amount Released: _____ G/T/P/Y (If PT or LB or <10 LB on dry pavement, not reportable)
   c) Contained in Bldg. (If yes, no reportable): YES _____ NO _____
   d) Was the Release to: _____ Air, _____ *Surface Water, _____Pavement, _____Soil
   e) Was the Release: _____ Continuous, _____ Episodic
   f) Was the Release Reportable: YES NO
5. **Cause of Release:** _____
6. **Clean up Procedure:**
   a) Liquid Material (Free-Standing Liquid): _____
      1) Treatment Method (If any): _____
      2) Removal Method: _____
      3) Transferred to: Container Type: _____ Container No.: _____
      4) Volume Transferred: _____ gallons
   b) Solid Material:
      1) Treatment Method (If any): _____
      2) Removal Method: _____
      3) Transferred to: Container Type: _____ Container No.: _____
      4) Volume Transferred: _____ lbs/yards
7. **Agencies Contacted:**

AGENCY	TIME/DATE	CONTACT	PHONE NO.	COMMENTS
MDEQ - Local	called: return call:		(313) 953-1494	
Waste Division	called: return call:		(517) 373-0530	
Nat. Resp. Center			(800) 424-8802	
MDEQ On-site Rep.			If on-duty or a witness	
U.S. Coast Guard*			(313) 568-9580	
USEPA Region V*			(312) 353-2197	

* CONTACT IF RELEASE IS TO WATERWAY.

_____ _____

ame of EC Signature Date

REV. 2, 1-98

FORM NO. 3

EDS ROMULUS FACILITY

INCIDENT INVESTIGATION FOLLOW-UP REPORT

DIVISION: _____ LOCATION: _____

SUPERVISOR'S NAME (Completing this form): _____

Incident Date: _____ Incident Time: _____ am/pm

Injured Employee's Name: _____

Injured Employee's Title: _____ How long doing job? _____

EMPLOYEES INVOLVED IN THE INCIDENT (name and title):

Name: _____ Title: _____

Name: _____ Title: _____

Name: _____ Title: _____

TASK AND ACTIVITY AT THE TIME OF THE ACCIDENT:

a) General Type of Task: _____

b) Specific Activity: _____

c) Employee was working: Alone ____ With crew/fellow worker ____ Other ____

Specify: _____

SUPERVISION AT TIME OF INCIDENT: Directly supervised____ Supervision at scene____

Not supervised____ Explain: _____

HOURS WORKED THAT DAY PRIOR TO INCIDENT: _____ DAY OF WEEK: _____

LIGHT: Daylight____ Dawn/Dusk____ Dark - no light____ Dark - artificial light ____ Unknown____

WEATHER: Clear____ Raining____ Snowing____ Fog____ Sleet____ Other_____

TEMPERATURE: _____ OTHER CONDITION: _____

DESCRIBE HOW EVENT OCCURRED (Use additional paper if necessary): _____

_____

_____

_____

_____

_____

FORM NO. 3

EDS ROMULUS FACILITY
INCIDENT INVESTIGATION FOLLOW-UP REPORT

PREVENTABLE INCIDENT: (WAS THE INCIDENT PREVENTABLE BY EDS EMPLOYEE?)

YES ____ NO ____

CORRECTIVE ACTIONS: (EMPLOYEE COUNSELING, RETRAINING, OJT, ETC.)

CORRECTIVE ACTION PLAN: (ACTIONS TO PREVENT REOCCURRENCE - INCLUDING TARGET DATES & RESPONSIBILITY)

SUPERVISOR: _____ DATE: _____

GENERAL MANAGER: _____ DATE: _____

COMMENTS: _____

HEALTH AND SAFETY MANAGER: _____ DATE: _____

COMMENTS: _____

FORM NO. 4

EDS ROMULUS FACILITY
INCIDENT INVESTIGATION FOLLOW-UP REPORT

RISK: (EVALUATION OF LOSS POTENTIAL, IF NOT CORRECTED)

LOSS SEVERITY POTENTIAL — PROBABILITY OF OCCURRENCE

Major___ Serious____ Minor____ — High____ Medium____ Low____

IMMEDIATE CAUSES: (USE ADDITIONAL PAPER, IF NECESSARY, TO DESCRIBE FACTS, CONDITIONS, ENVIRONMENT, ETC.)

UNDERLYING CAUSES: (TRAINING, MANAGEMENT, PERSONAL FACTORS, MAINTENANCE, ETC.)

MANAGEMENT CONTROL

1. Leadership and Administration	P ____	S ____	C ____
2. Management Training	P ____	S ____	C ____
3. Planned Inspections	P ____	S ____	C ____
4. Task Analysis and Procedures	P ____	S ____	C ____
5. Accident/Incident Investigation	P ____	S ____	C ____
6. Task Observations	P ____	S ____	C ____
7. Emergency Preparedness	P ____	S ____	C ____
8. Company Rules	P ____	S ____	C ____
9. Accident/Incident Analysis	P ____	S ____	C ____
10. Employee Training	P ____	S ____	C ____
11. Personal Protective Equipment	P ____	S ____	C ____
12. Health Control	P ____	S ____	C ____
13. Program Evaluation System	P ____	S ____	C ____
14. Engineering Controls	P ____	S ____	C ____
15. Personal Communications	P ____	S ____	C ____
16. Group Safety Meetings	P ____	S ____	C ____
17. Off-the-job Safety	P ____	S ____	C ____

LEGEND: P = Improve Implementation S = Improve Standard C = Improve Compliance

FORM NO. 5 EDS Incident No._____

EDS ROMULUS FACILITY
SUPERVISOR'S ACCIDENT REPORT

DECISION: _____ ACCIDENT TYPE: _____

Injury: _____
Illness: _____
Fatality: _____
Property: _____
M.V. Acc.: _____
OSHA Rec.: _____

LOCATION: _____

_____

EMPLOYEE INFORMATION:

Name: _____ S.S.No.: _____

Home Address: _____

Age: _____ Sex: M F Occupation: _____

Total Experience This Occupation: _____

Date and Time Accident Occurred, or Illness Diagnosed: Date: _____ Time: _____(am/pm)

Place Where Accident Occurred: _____

Employee Activity, When Injured: _____

_____

How did Accident Occur: _____

_____

Description of Injury and Body Part Affected: _____

_____

Was an Unsafe Condition Involved: _____

_____

Please Identify this Unsafe Condition: _____

_____

What Action will be Taken to Prevent Reoccurrence: _____

_____

_____

*If this accident involved a motor vehicle please fill out Supplement #1 - Supervisor's Accident Report, Motor Vehicle.

_____ _____

Supervisor's Signature Date General Manager's Signature

FORM NO. 6

SUPPLEMENT #1 - SUPERVISOR'S ACCIDENT REPORT
MOTOR VEHICLE

DRIVER: _____ S.S. NO.: _____

LOCATION OF ACCIDENT: _____

VEHICLE NO.: _____ Make/Model of Cab: _____ Body: _____

Describe Driving Maneuver, the Accident and Damage (use diagram below): _____

_____

What was the basic accident cause? _____

_____

Were police called? _____ Citation issued? _____ To whom? _____

For what? _____

This report is confidential and to be used only by "Company Officials and the Involved Operator". Draw "Complete" diagram showing position of all involved vehicles at Time of Collision and Final Position showing direction of travel, both Before and After collision. Correct diagram to fit streets involved. Use the following symbols:

WEATHER
- Clear
- Cloudy
- Fog
- Rain
- Snow
- Sleet
- Other

LIGHTING
- Daylight
- Dusk
- Dark - No St.. lights on
- Dark - St. lights on
- Headlights (dim)
- Headlights (high)
- No lights on
- Dark
- Dawn

ROAD SURFACE
- Dry
- Muddy
- Snowy
- Snow-covered
- Ice in places
- Ice-covered
- Other
- Wet

ROAD DESCRIPTION
- Straight
- Level
- Hill
- Paved
- One-way
- Divided Road
- Intersection
- Curve
- Up
- Down
- Black Top
- Two-way

FORM NO. 7

DRIVER'S REPORT OF ACCIDENT

EXACT LOCATION OF ACCIDENT: _____

VEHICLE NO.: _____ Make/Model of Cab: _____ Body: _____

Describe Driving Maneuver, the Accident and Damage (use diagram below): _____

_____

Were police called? _____ By whom? _____

Ticket issued? _____ By whom? _____

For what alleged violation? _____

Police Department: _____

This report is confidential and to be used only by "Company Officials and the Involved Operator". Draw "Complete" diagram showing position of all involved vehicles at Time of Collision and Final Position showing direction of travel, both Before and After collision. Correct diagram to fit streets involved. Use the following symbols:

WEATHER
- Clear
- Cloudy
- Fog
- Rain
- Snow
- Sleet
- Other

LIGHTING
- Daylight
- Dusk
- Dark - No St.. lights on
- Dark - St. lights on
- Headlights (dim)
- Headlights (high)
- No lights on
- Dark
- Dawn

ROAD SURFACE
- Dry
- Wet
- Muddy
- Snowy
- Snow-covered
- Ice in places
- Ice-covered
- Other

ROAD DESCRIPTION
- Straight
- Curve
- Level
- Hill
- Up
- Down
- Paved
- Black Top
- One-way
- Two-way
- Divided Road
- Intersection

ACTION OF DRIVERS	YOU	OTHER
Exceeding Safe Speed		
On Wrong Side of Street		
Did not Have Right-of-way		
Disobeyed Traffic Signal		
Illegal Passing		
Improper Turning: L or R		
Improper Backing		
Following Too Closely		
Failure to Signal		
Improper Lane Change		
Misjudged Clearance		
Other		

WHAT WAS THE SPEED LIMIT?
_____ MPH

WITNESSES?
- YES
- NO

TRAFFIC CONTROL
- Signal Lights
- Caution Lights
- Stop Sign
- Police Officer
- None
- Other

Witness Name: _____

Address: _____

Witness Name: _____

Address: _____

FORM NO. 8

EDS FACILITY
EMPLOYEE REPORT OF ACCIDENT/ILLNESS

DIVISION: _____

LOCATION: _____

EMPLOYEE INFORMATION:

Name: _____ S.S. No.: _____

Home Address: _____

Age: _____ Sex: M F Occupation: _____

Total Experience This Occupation: _____

Date and Time Accident Occurred: Date: _____ Time: _____ (am/pm)

Place Where Accident Occurred: _____

How did Accident Occur: _____

_____

Description of Injury and Body Part Affected: _____

_____

Did you report accident? _____ To whom? _____ When? _____

Was First Aid or medical treatment provided? _____ By whom?

_____

Was an Unsafe Condition Involved: _____

Please Identify this Unsafe Condition: _____

_____

Was this condition previously reported? _____ If so, by whom/when? _____

*If this accident involved a motor vehicle please fill out Driver's Report of Accident

_____ _____

Employee's Signature Date Reviewed by: Date

FORM NO. 9

EDS ROMULUS FACILITY
INTERNAL REPORT - (NEAR MISS)

NOTE: This form is for Safety & Environmental Near Miss Incidents. For Accidents and Reportable Incidents use Accident and Injury Form or Reportable Spill Forms.

DIVISION: _____

LOCATION: _____

LOCATION OF INCIDENT: _____

INCIDENT: DATE: _____ TIME: _____ am/pm

DESCRIBE INCIDENT: _____

_____

_____

REPORTED: DATE: _____ TIME: _____ am/pm

REPORTED TO: _____ TIME: _____ am/pm

_____ TIME: _____ am/pm

_____ TIME: _____ am/pm

Did an act or condition contribute to or cause incident? YES____ NO____

If so, describe act or condition: _____

_____

_____

Was this act or condition previously reported? YES____ NO____

If so, by whom and when? _____ Date: _____

_____ _____

Supervisor's Signature Date Reviewed by Date

APPENDIX 2.70-3

EMERGENCY RESPONSE CONTRACTOR AGREEMENTS

K & D INDUSTRIAL SERVICES, INC.
6470 BEVERLY PLAZA
ROMULUS, MICHIGAN 48174
(313) 729-3350

K & D INDUSTRIAL SERVICES, INC.
STANDARD RATE SHEET

JULY 1, 1996

WASTE TRANSPORTATION EQUIPMENT (without operators)		PER HOUR
Vacuum Pumper - 3,000 Gallon		$ 50.00
Vacuum Tanker - 6,000 Gallon		65.00
Bulk Tanker - 6,000 - 9,000 Gallon		65.00
Vactor "2045" - Wet/Dry Vac		75.00
Vactor "XPS" - Wet/Dry Vac		75.00
Roll Off Tractor/Trailer		60.00
Roll Off Container Rental - 20 Yard Open Top	per day	10.00
	per month	250.00
- 20 Yard Vacuum Container	per day	25.00
	per month	400.00
Dump Trailer w/Tractor		60.00
Box Van w/Tractor		60.00
Stake Truck w/Lift Gate		45.00

CLEANING EQUIPMENT (without operators)		PER HOUR
Jet Cleaner		45.00
Winch Machines - Per Pair		55.00
Waterblaster - 10,000 PSI		45.00
- 2-D/3-D Nozzles		20.00
- Rotating Lance		20.00
- Spin Jet Floor Cleaner		20.00
NLB 250 Waterblaster - 10,000 PSI		100.00
Hot Waterblaster - 10,000 PSI		55.00
Waterblaster - 20,000 PSI		150.00
- Cutting Tools		30.00
Waterblaster - 36,000 PSI		250.00
Power Washers - 3,000 PSI		25.00
Steam Cleaners		25.00
Soda Blaster (including media)		150.00
Vac Loader		65.00
Barrel Crusher		50.00
Sykes Pump 4"		40.00
Sykes Pump 6"		50.00
Air Diaphram or Trash Pump	per day	150.00
Exhaust Flex - 20' Section	per day	30.00
Dewatering Units		on request
Hydraulic Dredges		on request
Brown Bear Mixer		on request

REV. 2, 1-98

EXCAVATION EQUIPMENT	PER HOUR
Back Hoe	$ 50.00
Front End Loader	60.00
Bull Dozer	55.00
Excavator	95.00
Low Boy Trailer W/Tractor	55.00

EMERGENCY RESPONSE & SAFETY EQUIPMENT		PER HOUR
Emergency Response Vehicle		$ 40.00
Emergency Response Trailer		60.00
Recovery Boat W/Outboard Motor		50.00
Air Mover		15.00
Combustible Gas Monitor		25.00
Containment Boom Rental	per foot/per day	1.50
Decontamination Station	per day	100.00

PERSONNEL SAFETY EQUIPMENT		PER DAY
Confined Space Entry Equipment (includes air monitor, tripod, etc.)		$250.00
Level A - 2 person minimum	per person	350.00
Level B - 2 person minimum	per person	125.00
Level C	per person	50.00
Level D	per person	10.00

NON-REUSABLE SUPPLIES		PER UNIT
Duct Tape	per roll	$ 6.00
Caution Tape	per roll	10.00
Disposable Boot Covers	per pair	7.00
Sorbent Pads - 26" x 36"	each	10.00
Sorbent Pad Roll - 36" wide	per roll	125.00
Sorbent Boom	per sec.	50.00
Soda Ash	per bag	35.00
Visqueen	per roll	65.00
Roll Off Box Liner	each	35.00
17H DOT Drums	per drum	50.00
17E DOT Drums	per drum	45.00
34 Spec. DOT Plastic Drums	per drum	85.00
Over Packs/Recovery Drums	per drum	125.00
Enviropacks	per drum	150.00
Oil Dry	per bag	7.00
4" Flex Hose (100' roll)	per roll	60.00
6" Flex Hose (100' roll)	per roll	90.00
Degreaser	per gallon	4.50
Sand Bags	per bag	10.00

LABOR	STRAIGHT TIME	OVERTIME	HOLIDAYS/ SUNDAYS	CHRISTMAS
Operator	$28.00	$40.50	$50.00	$60.00
Crew Leader	29.00	42.00	52.00	62.00
Supervisor	33.00	45.50	55.00	65.00
Project Manager	50.00	50.00	60.00	70.00

Per Diem When Required $60.00 Per Man

All charges for labor and equipment are portal to portal at the K&D facility. A four hour minimum applies to labor and equipment. The driver of a vehicle is charged at crew leader rates.

Straight Time - First eight hours of any pre-scheduled shift, Monday through Friday.

Overtime - After eight hours, first eight hours of weekday emergency service, and Saturdays.

All waste analysis, disposal, and tank wash outs will be invoiced at cost plus 15%.

Payment terms are net 30 days.

REV 2 1-98

K & D INDUSTRIAL SERVICES, INC.
STANDARD RATE SHEET

WASTE TRANSPORTATION EQUIPMENT (without operators)	PER HOUR
Vacuum Pumper - 3,000 gallon	$ 46.00
Vacuum Tanker - 6,000 gallon	66.00
Bulk Tanker - 6,000/9,000 gallon	60.00
Vactor 2045 - Wet/Dry Vac	80.00
Vactor XPS - Wet/Dry Vac	95.00
Roll Off Tractor/Trailer	60.00
Roll Off Container Rental-20 yard Open Top/Per Day	10.00
/Per Month	250.00
-Sludge Container/Per Day	25.00
/Per Month	400.00
Dump Trailer w/Tractor	55.00
Box Van w/Tractor	60.00
Stake Truck w/Lift Gate	40.00

CLEANING EQUIPMENT (without operators)	PER HOUR
Jet Cleaner	$ 42.00
Winch Machines - per pair	55.00
Waterblaster - 10,000 PSI	42.00
- 2D/3D Nozzle	20.00
- Rotating Lance	20.00
- Spin Jet Floor Cleaner	20.00
NLB-250 Waterblaster - 10,000 PSI	90.00
Hot Waterblaster - 10,000 PSI	55.00
Waterblaster - 20,000 PSI	150.00
- Cutting Tools	30.00
Power Washers - 3,000 PSI	25.00
Steam Cleaners	25.00
Soda Blaster (including media)	150.00
Vac Loader	65.00
Mobile Sweeper	45.00
Barrel Crusher	50.00
Sykes Pump 4"	40.00
Sykes Pump 6"	50.00
Air Diaphram/Trash Pump - per day	150.00
Exhaust Flex - 20' Section - per day	30.00
Dewatering Units	on request
Hydraulic Dredges	on request
Brown Bear Mixer	on request

EXCAVATION EQUIPMENT	PER HOUR
Back Hoe	$ 50.00
Front End Loader	60.00
Bull Dozer	55.00
Excavator	95.00
Low Boy Trailer w/Tractor	55.00

EMERGENCY RESPONSE & SAFETY EQUIPMENT	PER HOUR
Emergency Response Vehicle	$ 40.00
Emergency Response Trailer	60.00
Recovery Boat w/Outboard Motor	50.00
Air Mover	15.00
Combustible Gas Monitor	25.00
Containment Boom Rental - per foot/per day	1.50
Decontamination Station - per day	100.00

POWER VAC SERVICE, INC.

SPILL RESPONSE CONTRACT

Effective January 1, 1995

REV. 2, 1-98

ENERAL TERMS

. CHARGES commence upon notification to proceed and terminate of conclusion of operation. Includes time required for transport of personnel and equipment to and from origin and necessary time for clean-up and decontamination of equipment. Minimum call out time is four (4) hours per person and equipment.

2. STRAIGHT TIME (TS) rate will apply for hours worked from 8:00 a.m. to 4:00 p.m., Monday through Friday. The OVERTIME (OT) rate will apply for all other hours worked except for work done on Sunday and Federal holidays, which will be compensable at the DOUBLE TIME (DT) rate.

3. TRAVEL TIME for all personnel classifications will be compensable at regular straight item man hour rates (out of town) commencing from the time personnel are mobilized until their arrival at the job site, and for the return from the job site to the base of operations. Actual travel hours will be used when calculating the amount due, and will not exceed ten (10) hours per day. Travel time costs will be incurred for all projects more than fifty (50) miles from the MPC base of operations.

4. The STANDBY RATE FOR EQUIPMENT will be charged at the above listed operational rates less 15%. Standby rates will apply only during the transportation of equipment, and for hours spent in standing by due to inclement weather, mechanical breakdown, or for the time spent waiting parts delivery. Standby rates will not apply during work stoppage requested by customer.

5. Cleaning of equipment after a job will be specified on the worksheets. Charges for tanker cleaning or other services relating to the job will be billed at cost plus 20%.

6. AIR MASK BONUS pay per man is $25.00 per day/job.

7. Reimbursable costs shall consist of only those items listed below which are incurred and paid subsequent to the date of ontract and which are incurred by contractor for accomplishing services under this contract. Reimbursable cost shall be oiced to customer at actual costs incurred and paid by the Company, plus the mark up shown below. Power Vac will be mbursed for the following in U.S. dollar:

7.1 Any repair or replacement of equipment caused by loss or damage (other than normal "wear and tear") will be charges to the customer at:

A. Cost of replacement or repair plus 20%
B. Labor charges for replacement or repair plus 20%
C. Cost of shipping and handling plus 20%

7.2 The actual costs plus 20% of air freight bills incurred for equipment shipments to and from the job site, except as provided otherwise by customer.

7.3 PER DIEM ON ALL JOBS MORE THAN 50 MILES FROM PVS BASE

A. Meals will be reimbursed at the rate of $35.00/man/day.
B. Lodging will be reimbursed at the actual cost incurred plus 20%.
C. Outside the continental United States. (which does not include Alaska or Hawaii), per diem rates will be as per the rates published in the Federal Travel Directory, (available from the U.S. Government Printing Office), plus 20%.

7.4 Airfare to and from the job site will be reimbursed at the actual cost plus 20%.

7.5 Subcontractors, if required for performance of work, will be charged at actual cost plus 20%.

7.6 Materials and supplies required for the performance of work will be billed at actual cost plus 20%.

8. DISPOSAL APPROVAL FEES: If the customer requires the PVS staff to obtain disposal approval(s) for waste stream(s), PVS will charge $65.00/hr for the time spent in getting the approval from the designated disposal facility. There will be a minimum charge of three (3) hours ($195.00), and the maximum charge will not exceed $520.00. This charge will include the time spent by the chemist, site visits, telephone calls, and completion and submittal of all required paperwork.

9. Under certain circumstances, Client may be eligible for reimbursement of incurred tank removal expenses under a state operated program called "MUSTFAA" (Michigan Underground Financial Assurance Act). Call 1-800-4-MUSTFA for furth details.
However, Client's obligation to pay PVS for services provided is not dependent upon receipt of reimbursement under MUSTFAA.
PVS must be paid as per PVS designated payment terms.

10. All rates quoted above are predicated upon equipment and personnel availability. Although every possible effort will be made to initiate a timely response, PVS cannot guarantee an immediate response to a spill situation should an emergen arise.
PVS expressly disclaims any liability arising as a result of a delayed or lack of response.

11. PAYMENT TERMS: Net due upon receipt of invoice unless modified by purchase order or contract. Finance charge of per month will be due to payment past due after thirty days from the date of invoice. An advance deposit may be require before the start of work.

12. The parties agree that this Contract incorporates a debt incurred in the ordinary course of business or financial affairs of purchaser: that all payments made on this Contract will be made in the ordinary course of business and financial affairs o other: that all payments will be made according to the ordinary business terms of each other and in the industry.

The above rates and terms are agreed to and accepted by:

Signature: Justine Marshall Date: 10.1.96

Title: Vice President

Company Name: Environmental Disposal Systems, Inc.

Received by: Robert Pauch Date: 10.7.96
for Power Vac Service, Inc.

UNIT COS
for REMEDIAL SERVICE

TECHNICAL MANAGEMENT PERSONNEL

Project Manager	$100/hr
Certified Industrial Hygienist	$100/hr
Health & Safety specialist	$90/hr
Project Engineer or Scientist	$90/hr
Assistant Project Engineer or Scientist	$80/hr
Senior engineer or Scientist	$75/hr
Engineer or Scientist	$50/hr
Technician	$45/hr
Draftsperson	$40/hr
Word Processor	$35/hr
Clerk	$25/hr

CORPORATE MANAGEMENT PERSONNEL

Principal	$150/hr
Legal Staff	$150/hr
Project Director	$125/hr
Staff Consultant	$125/hr

WORK SITE PERSONNEL

	Overtime	Premium Time	Regular Time
Site Supervisor	$110/hr	$90/hr	$75/hr
Foreman	$80/hr	$65/hr	$45/hr
Operator	$75/hr	$60/hr	$45/hr
Welder	$75/hr	$60/hr	$45/hr
Mechanic	$75/hr	$60/hr	$45/hr
Electrician	$75/hr	$60/hr	$45/hr
Carpenter	$75/hr	$60/hr	$45/hr
Truck Driver	$70/hr	$55/hr	$40/hr
Breathing Air Time			$7.50/hr
Per Diem			$75/day per man

PROTECTIVE CLOTHING

EPA Level A Protection	$425/shift
EPA Level B Protection	
with Tyvek Suit	$245/shift
with Saran-coated Suit	$285/shift
with Acid suit	$360/shift
EPA Level C Protection	
with Tyvek Suit	$110/shift
with Saran-coated suit	$145/shift
with Acid Suit	$225/shift
EPA Level D Protection	$25/shift

$185/day

Protective clothing prices above include four sets of clothing used in each ight hour shift. Supplied air systems are supplied with 50 feet of breathing se. Level C protection includes three sets of respirator cartridges. Add- onal disposable or damaged/contaminated equipment is billed at cost lus 20 %. Non disposable equipment used beyond that described below will be charged at rates to be agreed upon with the client specific to the project.

Regulated Manifold Air-Supply System	$100/da
Emergency Escaped Air Paks	$60/da
Additional Bottles-Breathing Air	$20/da
Breathing Air Hose per 50 feet	$30/da
Emergency Oxygen system	$25/da
Portable eye Shower	$30/da
Cascade System w/Booster Pump,4 way	$350/da
Cascade System w/Booster Pump,2 way	$250/da
Bomb Suit	$600/da
Cooling System/Heat Exchange	$60/da
Bottle Rack	$30/da

VACUUM EQUIPMENT

High Pressure Tank	$135/hr &.50/mile
Vacuum Truck 3,500 g.	$85/hr & .50/mile
Vacuum Truck 2,000 g.	$80/hr & .50/mile
Vacuum Truck 1,800 g.	$75/hr & .50/mile
Vacuum Unit, 1,500 g.	$42/hr
Mobile Vacuum Loader 3,600 cfm	$73/hr
Mobile Vacuum Loader 1,600 cfm	$47/hr
Mobile HEPA Trailer	$26/hr

TRUCKS AND TRAILERS

Over the road diesel tractor	$360/day + $.90/m
Pollution Control Truck,2 ton	$310/day + $.50/m
Pollution Control Truck,1 ton	$260/day + $.30/m
Pickup Truck(4WD)Suburban(4WD)	$105/day
Truck,2-ton Box	$260/day +$.50/m
Truck,1-ton Box	$205/day +$.30/m
Truck,2-ton Stake	$240/day +$.50/m
Truck,1-ton Stake	$185/day +$.30/m
Boom Truck,2-ton	$440/day
Pickup Truck	$90/day(mileage included
Van	$100/day(mileage included
Car	$75/day(mileage included
Service Van/Mechanic's	Truck,$205/day+$.30/m
Decon and Office Trailer, 45 foot	$410/day
Decon and Office Trailer, 28 foot	$235/day
Decon and Equipment Trailer	$395/day
Combination Decontamination Trailer	$360/day
Combination Shower Trailer	$360/day
Tanker trailer,5,000 gallon Stainless	$415/day
Lowboy Trailer	$185/day
Gooseneck coilly Trailer	$185/day
Drop deck Trailer	
Utility Trailer	$125/day
Crew Trailer	$285/day
Box Trailer	$ 65/day
Bomb Trailer	$1,150/day

Recovery and Treatment Equipment

Treatability Trailer ..... Quoted per occurrence
Hydrostatic Injection System .. Quoted per occurrence
Clarifier with Sludge Collector Unit,
12,000 gallon $365/day
Clarifier, Plate Settler Unit $365/day
Mobile Clarifier with Sludge Collector Unit,
12,000 gallon $415/day
Mobile Clarifier, Plate Settler Unit $415/day
Clarifier, Low-capacity, 4,000 gallon $235/day
Compatibility Chamber
10,000 gallon $395/day
5,000 gallon $270/day
Holding Tank
Greater than 5,000 gallon $50/day
1,000 to 5,000 gallon $38.00/day
Mobile Activated-carbon Filtration unit $310/day
Activated-carbon Filtration Unit,
Potable Water, 2 cell $360/day
2 cell $295/day
1 cell $200/day
low capacity $80/day
Mixed-media Prefilter
High capacity $200/day
Low capacity $80/day
Portable Pool, 50,000 gallon ..... $215/day + liner
Portable Pool, 12,000 gallon ..... $105/day + liner
Ram Ejection Dump Trailer $210/day
Hydrocarbon Recovery System
4 inch ..... Quoted per occurrence
2 inch ..... Quoted per occurrence
Oil-recovery System ..... Quoted per occurrence
Vapor-recovery System ..... Quoted per occurrence
Tank Mixer $40/day
Drum Mixer $35/day
Motionless Well Mixer, 3 inch $35/day
In-line Bag Filter $25/day
On-line Filter $20/day
Flow Meter $25/day
Portable Building ..... Quoted per occurrence
Air-stripping Chambers ..... Quoted per occurrence

Mobile Analytical Equipment

GC/MS Analytical Laboratory
..... Quoted per occurrence
Analytical Laboratory $570/day
Gas Chromatograph with Integrator/Detector
..... $365/day
Sample Inlet System $195/day
Head-space Analyzer $160/day
Auto Sampler $315/day
Atomic-absorption Unit $620/day
Mercury Detector $155/day
Spectrophotometer, HACH $75/day
Turbidity Meter $75/day
Specific-ion Meter $80/day
pH Meter $20/day
Flash-point Analyzer $70/day
Sonicator $105/day
Ep-toxicity Extractor $75/day
Centrifuge $35/day
Aerosol Monitor $35/day
Air-flow Calibrator $25/day
Drager Gas Sampler $25/day
Cyanide Meter with Generator $80/day
Sulfide Meter with Generator $80/day
Carbon-monoxide Detector $80/day
Methane-gas Detector $80/day
Photoionization Detector $130/day
Explosiometer $75/day
Geiger Counter $95/day
Organic-vapor Analyzer $105/day
pH Controller $35/day
Hydrolab Meter $210/day
Laboratory Filter Press $70/day
Oil-content Analyzer $260/day

Note: Mobile Analytical Laboratories include fume hood, balances, drying oven, and laboratory glassware. Reagent, carrier gases, columns, contaminated glassware and miscellaneous laboratory expendable items will be billed at invoice plus 20 percent.

Heavy Equipment

Crane, 28 ton $95/hr
Scarifier $595/day
D-6 Cat Dozer or Equal (with winch) $75/hr
D-4 Cat Dozer or Equal $60/hr
D-3 Cat Dozer or Equal $46/hr
350 Case Dozer or Equal $46/hr
966C Rubber Loader or Equal $100/hr
963 Track Loader or Equal $82/hr
953 Track Loader or Equal $75/hr
950 Rubber Loader or Equal $87/hr
936 Rubber Loader or Equal $82/hr
930 Rubber Loader or Equal $77/hr
916 Rubber Loader or Equal $57/hr
Cat 225 Trackhoe or Equal $87/hr
Cat 215 Trackhoe or Equal $82/hr
Case 580 Backhoe or Equal $45/hr
Bobcat, 4WD $35/hr
Forklift $35/hr
Cat 235C Backhoe or Equal $235/hr
Cat 245 Backhoe or Equal $309/hr

Lights and Generators

Satellite Light $28/day
Light Plant, 5 kW ..... $275/day + fuel
Generator, 350 kW ..... $750/day + fuel
Generator, 150 kW ..... $525/day + fuel
Generator, 50 kW ..... $385/day + fuel
Generator, 30 kW ..... $225/day + fuel
Generator, 15 kW ..... $175/day + fuel
Generator, 12 kW ..... $130/day + fuel
Generator, 6.5 kW ..... $100/day + fuel
Generator, 5 kW ..... $85/day + fuel

Compression Equipment

- Hydroblaster, 8,000 psi ..... $825/day + fuel
- High-pressure Water Laser
  - 3,000 psi ..... $465/day + fuel
  - 2,000 psi ..... $360/day + fuel
- Burner
  - 5,000,000 Btu ..... Quoted per occurrence
  - 1,000,000 Btu ..... $245/day + fuel
  - 535,000 Btu ..... $195/day + fuel
- Steamer
  - 500,000 Btu ..... $375/day + fuel
  - 350,000 Btu ..... $285/day + fuel
  - 200,000 Btu ..... $205/day + fuel
- Airless Sprayer
  - High Volume ..... $225/day + fuel
  - Low Volume ..... $75/day + fuel
- Pressure Washer
  - 500,000 Btu ..... $375/day + fuel
  - Portable ..... $50/day + fuel
- Air Compressor
  - 750 cfm ..... $495/day + fuel
  - 230 cfm ..... $255/day + fuel
  - 185 cfm ..... $185/day + fuel
- Air Blower
  - 7,500 cfm ..... $435/day + fuel
  - 5,000 cfm ..... $395/day + fuel
  - 4,000 cfm ..... $335/day + fuel
  - 3,000 cfm ..... $290/day + fuel
  - 1,000 cfm ..... $170/day + fuel
  - 350 cfm ..... $155/day + fuel
  - portable ..... $60/day + fuel
- Positive-displacement Air Pump
  - 750 cfm $485/day
  - 250 cfm $250/day
  - 150 cfm $140/day
- High-pressure, Tank-cleaning Head $270/day

Water Equipment

- Robalo Boat $360/day
- Pontoon Boat, 30 foot $260/day
- Jon Boat $60/day
- Boat Motor
  - 80 hp $130/day
  - 15 to 30 hp $80/day
- Oil-Skimmer Head $50/day
- Containment Boom
  - 6 inch ..... $90 per 100 feet/day
  - 4 inch ..... $60 per 100 feet/day

Pumping Equipment

Note: All pump rates include 10 feet of suction hose and 50 feet of discharge hose.

- Vacuum-pressure Pump
  - 12 inch ..... $495/day + fuel
  - 8 inch ..... $395/day + fuel
  - 6 inch ..... $305/day + fuel
  - 4 inch ..... $260/day + fuel
- Hydraulic Sludge Pump, 3 inch $190/day
- Pneumatic Recovery Pump $420/day
- Electrical Submersible Pump
  - 6 inch $385/day
  - 4 inch $335/day
  - 3 inch $195/day
  - 2 inch $85/day
- Trash Pump, 3 and 4 inch ..... $290/day + fuel
- Centrifugal Pump
  - 3 inch $210/day
  - 2 inch $185/day
  - 1 1/2 inch $160/day
- Diaphragm Pump
  - 3 inch $155/day
  - 2 inch $135/day
  - 1 1/2 inch $120/day
  - 1 inch $95/day
  - 3 inch, Stainless Steel $230/day
  - 2 inch, Stainless Steel $185/day
  - 1 1/2 inch, Stainless Steel $160/day
  - 1 inch, Stainless Steel $130/day
  - 1 1/2 inch (EPDM) $160/day
- Progressive Cavity Pump, 6 inch $210/day
- Petro Purge Pump with Controls 1 1/2 inch $115/day
- Hydro Purge Pump with Controls, 2 inch $85/day
- Explosion-proof Barrel Pump $125/day
- Chemical-feed Pump $45/day
- Recovery Well Pump, 1 1/2 inch $37/day
- Well Development Pump $32/day
- High-pressure Pump, 1 1/2 inch $90/day
- Suction Hose
  - 3 and 4 inch ..... $75 per 100 feet/day
  - 2 inch ..... $64 per 100 feet/day
  - 1 1/2 inch ..... $43 per 100 feet/day
- Discharge Hose
  - 3 and 4 inch ..... $25 per 50 feet/day
  - 2 inch ..... $21 per 50 feet/day
  - 1 1/2 inch ..... $19 per 50 feet/day
- Air Hose
  - 1 1/2 inch ..... $38 per 50 feet/day
  - 3/4 inch ..... $23 per 50 feet/day
- Aluminum Transfer Pipe, 6 inch ..... $16 per 20 feet/day

Specialized Tools and Equipment

- Stone Crushing and Screening Plant ..... Quoted per occurrence
- Pugmill
  - 3.5 yard ..... Quoted per occurrence
  - 1 yard ..... Quoted per occurrence
  - Feed System ..... Quoted per occurrence
- Reciprocating feeder ..... Quoted per occurrence
- Belt Feeder ..... Quoted per occurrence
- Shaker
  - Double Deck ..... Quoted per occurrence
  - Single Deck ..... Quoted per occurrence
- Belt Conveyor ..... Quoted per occurrence
- Screw Auger ..... Quoted per occurrence
- Cement Silo ..... Quoted per occurrence
- Inflatable Building ..... Quoted per occurrence
- Hydraulic Drum Grappler $360/day
- Hydraulic Claw Grappler $360/day
- Double-barrel Forklift Grappler $52/day

Hydraulic Shears, 490 ton $1,250/day
Hydraulic Shears, 200 ton $615/day
Hydraulic Ho-ram, 215 ..... $135/day
Hydraulic Ho-ram, Bobcat $52/day
Manlift ..... $130/day + fuel
Magnet with 4 kW Rectifier $105/day
Barrel Shredder
40 x 62 inch throat ..... $3,500/day + fuel
Can Shredder 18 x 20 inch throat $650/day
Plastic Shredder $260/day
Barrel Hopper $260/day
Kiln-dust Applicator $525/day
Soil Ripper $80/day
Petro-Tite Tank Tester $95/day
Petro-Tite Line Tester $85/day
Petro-Tite Supplementary Circulating Pump .$70/day
Portable Controlled-flow Sampler $85/day
Ground-water Flow Meter $270/day
Peristaltic Testwell Pump $75/day
Drill-rig Truck, 2-ton, B-53 ..... $98/hr + $.50/mile
Mobile Drill Rig, B-47 ..... $67/hr
Mobile Drill Rig, B-24 ..... $47/hr
Well Sampler Controller $90/day
Submersible Bladder Pump
1 1/2 inch, Stainless Steel $52/day
Water-level Indicator $14/day
Water-level Recorder $31/day
Oil/Water-level Indicator $47/day
Hermit Data Logger $62/day
Pressure Transducer $42/day
Split Spoon Soil Sampler, Manual $35/day
Sample Auger, 3 inch, Stainless Steel $75/day
Hydraulic Earth Drill $70/day
Blast Machine with Galvanometer $135/day

Miscellaneous Tools and Equipment

Concrete Coring Machine ..... $255/day + tooling
Pneumatic Nibbler $47/day
Cutting Torch $65/day
Welder $65/day
Welder, Gas Powered $125/day
Partner Saw $47/day
Chain Saw $40/day
Brush and Weed Cutter $60/day
Jackhammer $60/day
Vibratory Plate Compactor, 24" wide $55/day
Hammer Drill $55/day
Survey Instrument Set $90/day
Magnetic Metal Detector $130/day
Space Heater, 90,000 Btu ..... $26/day + fuel
Barrel Cart $30/day
Sandblaster $115/day
Power Auger, Two man $55/day
Equipment Hoist, 3 ton $70/day
Scaffolding ..... Quoted per occurrence
Sound-level Meter $26/day
Temporary Control Panel, 400 amp $130/day
Temporary Control Panel, 100 amp $60/day
Mobile Truck Scales $185/day
Portable Barrel Scales $70/day
Mercury Vacuum $155/day
HEPA Vacuum $135/day
Barrel Vacuum $50/day
Shop Vacuum $20/day
Radio, Handheld $26/day
Radio, Portable Base $50/day
Radio, Marine Band, Handheld $26/day
Portable Cellular Telephone $26/day
Microcomputer $50/day
Portable Computer $35/day
Facsimile (FAX) Machine $25/day

Aviation Equipment

Beechcraft King Air Turbo Prop Plane
..... $4.30/mile (round trip mileage)
..... +$125/hr waiting time
Learjet ..... $4.80/mile (round trip mileage)
..... + $125/hr waiting time

Invoicing Procedures

- CEC requires an executed contract, signed customer purchase order acceptable to CEC, or signed CEC terms and conditions to commence work.
- It is CEC's practice to progress invoice every 7 days. Progress invoices estimate work performed and costs incurred during the invoice period. A final invoice is issued at the completion of the job which summarizes actual use of rate-sheet items and other costs incurred.
- All work performed on an "emergency response" basis is invoiced at catalog price list rates plus 10 percent.
- All rates are subject to change without prior written notice.
- All rates are stated in United States dollars.
- All invoices are due upon receipt. Balances outstanding more than 30 days after the invoice date are subject to a monthly finance charge of 1 1/2 percent per month from the invoice date.

Subcontractors, Expendables, and Miscellaneous Items

- All subcontractors and/or costs for disposal, utilities, or other contracted project services are billed at invoice plus 30 percent.
- CEC per diem rates are charged for subcontractors whose expenses are paid by CEC.
- Expendable items inventoried and warehoused by CEC are billed according to the CEC expendables price list. Expendable itedms purchased locally for specific projects are billed at invoice plus 20 percent.
- A 4 percent surcharge on total daily labor rates is charged for hand-tool use. Hand tools include jig saw, skill saw, nailing gun, electric hammer, 1/2-inch electric impact wrench, reciprocating saw, angle grinder, and pipe threader. Hand tools damaged or contaminated by site conditions will be charged at their replacement plus 20 percent.

REV. 2, 1-98